

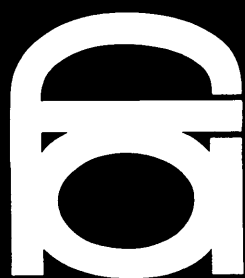
CONVENTION ISSUE

FOR REFERENCE

NOT TO BE TAKEN FROM THIS ROOM

SEP 29 1970

MIAMI Dade COMMUNITY COLLEGE  
MIAMI, FLORIDA



**The Florida Architect**

September  
October 1975



Walter Goodman Residence; Architect: Charles Harrison Pawley, AIA, Miami, Florida; Cabot's No. 241 Bleaching Oil.

# Bring Out the Best in Wood . . .

# ***Cabot's* STAINS**

Wood in itself is beautiful . . . evidence the Goodman Residence by Architect, Charles Harrison Pawley, AIA. The grain, the texture, the very character of the wood itself will add much to any home. Cabot's Stains bring out the best in wood, enhance the grain and texture, preserve the natural beauty of wood.

For exteriors: Cabot's Stains, available in 87 unique colors, are suitable for all types of lumber and all wood surfaces. Stains offer a unique combination of beauty, economy, and protection for shingles, siding, clapboards, paneling, decking, and fencing. A stained surface will not crack, peel or blister.

For interiors: Cabot's Stain Wax combines the soft penetrating color of a stain with a satin-soft lustre of a wax. It stains, waxes, and seals in one application. Available in 14 pleasing colors plus ebony, white, and natural. Suitable for all interior paneling, beams, timbers, woodwork, and floors.

**Cabot's Stains, the Original Stains and Standard for the Nation since 1877.**

*For color cards and further information, contact the following Cabot distributors:*

**SUNNY SOUTH PAINT CO.**

2503 Coral Way, Miami, Fla. 33145

**LAINHART & POTTER CO.**

715 25th St., West Palm Beach, Fla. 33401

# The Florida Architect

Volume 25 Number 5 September/October 1975

## CONTENTS

Message From the President .....	4
Letters .....	5
Advertisers .....	5
Orlando Hyatt House .....	5
61st Annual Convention Program .....	6
Building Product Exhibitors .....	8
Energy and Architecture in Florida by Nils M. Schweizer, FAIA .....	12
Who's Who at the Institute .....	13
1975 Architectural Design Awards .....	15
Training Paraprofessionals by Dr. John B. Langley, AIA .....	24
Inmates Learn Drafting .....	32
Recent Projects .....	33
Newsnotes .....	33
Calendar .....	33

### 1975 BOARD OF DIRECTORS

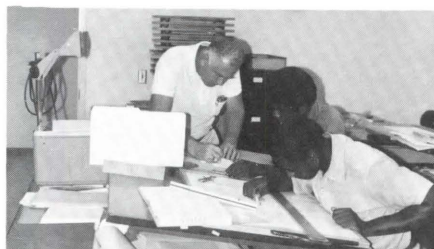
James H. Anstis  
Bruce Balk  
John McKim Barley, II  
William F. Bigoney  
Howard Bochiardy  
William Brainard  
Ellis W. Bullock  
Carl Gerken  
Norman M. Giller  
Martin Gundersen  
Carl Gutmann, Jr.  
William K. Harris  
Jerome A. James  
William Jolley  
Walter L. Keller  
Charles E. King FAIA  
Bertram Y. Kinsey, Jr.  
Robert H. Levison FAIA  
Stephen Little  
John McCormick  
Harry G. Morris  
Richard H. Morse  
Robert F. Petersen  
Richard T. Reep  
Henry A. Riccio  
Roy L. Ricks  
Francis R. Walton FAIA  
Jack West  
Robert L. Woodward



President's Message 4



Awards 15



Inmate Drafting 32

### FAAIA OFFICERS FOR 1975

James E. Ferguson, Jr., AIA, President  
2901 Ponce de Leon Boulevard  
Coral Gables, Florida 33134  
(305) 443-7758

Nils M. Schweizer, FAIA, Vice President  
President Designate  
P.O. Box 1120  
Winter Park, Florida 32789  
(305) 647-4814

Ellis W. Bullock, Jr., AIA, Secretary  
1823 North Ninth Avenue  
Pensacola, Florida 32503  
(904) 434-2551

James A. Greene, AIA, Treasurer  
5020 Cypress Street, Suite 211  
Tampa, Florida 33607  
(813) 872-8407

**THE FLORIDA ARCHITECT**, Official Journal of the Florida Association of the American Institute of Architects, Inc., is owned and published by the Association, a Florida Corporation not for profit. It is published bi-monthly at the Executive Office of the Association, 7100 N. Kendall Drive, Miami, Florida 33156. Telephone (305) 661-8947. Opinions expressed by contributors are not necessarily those of the Editor of the Florida Association of the AIA. Editorial material may be reprinted provided full credit is given to the author and to **THE FLORIDA ARCHITECT** and copy is sent to publisher's office. Single Copies, 75 cents, subscription, \$6.50 per year.

**Controlled Circulation Postage Paid, Miami, Florida**



Cover: Oceanfront Condominiums, View of Balconies 17

Next Issue: Convention Activities

**DIRECTORS OF FLORIDA REGION**  
American Institute of Architects  
H. Leslie Walker, FAIA  
1000 N. Ashley Street, Suite 806  
Tampa, Florida 33602  
(813) 229-0381

Herbert R. Savage, AIA  
P.O. Box 280  
Miami, Florida 33145  
(305) 854-1414

**EXECUTIVE DIRECTOR**  
Florida Association of The  
American Institute of Architects  
Fotis N. Karousatos, Hon. AIA  
7100 N. Kendall Drive, Suite 203  
Miami, Florida 33156  
(305) 661-8947

**GENERAL COUNSEL**  
(Branch Office)  
J. Michael Huey, Attorney at Law  
1020 E. Lafayette, Suite 110  
Tallahassee, Florida 32303  
(904) 878-4191

**PUBLICATIONS COMMITTEE**  
Lester C. Pancoast  
Charles H. Pawley  
Richard Schuster  
Donald I. Singer

**THE FLORIDA ARCHITECT**  
Fotis N. Karousatos/Publisher  
David E. Clavier/Editor  
Richard Schuster/Illustrator  
Kurt Waldmann/Photography

# Message from the President

The prognosis for the year ahead is that it will be a difficult time for many of us. The initial and perhaps the most continually pervasive issue deals with ourselves and our relationship to our communities. In my mind this begins with the understanding of who we are.

The architect is, I think, within this culture, one of the rare creatures. He has both intuitive and visual gifts which unfortunately today held in low esteem basically because people do not understand them. It is probably true that most architects do not understand themselves. Perhaps because they are gifts, they are not looked at too closely. However, it is important that those whom we serve in this culture begin to understand who we are and what we do.

I do not mean to imply that every person in our profession is alike, yet at this point in time, there is no reason why most of the architects in this state given their knowledge, training and their experience, cannot turn out creditable and thoughtful products for their clients who are the general public. Therefore, there must begin to be ways that we can tell them who we are, what we do and how we deal with the world about us.

There are also other issues involved in the coming year. There are the issues of the economic recession and of alternative practices. We perhaps will never again know a period of growth as we have known it in the past. There is the issue of education and requirements for continued licenses; there is the issue of relationships with the State Board of Architecture as well as state and local governments; there is the issue of energy and energy conservation; there is the issue of relationships with our fellow professionals, the engineers as well as other disciplines that we must begin to relate to in an understanding manner; there is the issue of the structure of the commissions and how to make them more effective; and there is the issue of — the old, old issue of the components and how to get them actively involved in the processes of developing their strengths within their own communities.

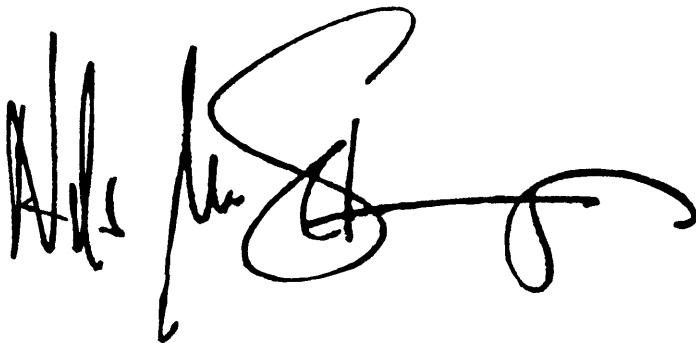
In this respect we perhaps need to form a diagnostic team which will go to each component and begin to set up some guidelines and standards as to how they need to structure themselves in terms of where they stand today and tomorrow.

Gentlemen, it is a new day. The good old days are now; tomorrow and the day after tomorrow, so let us grasp our opportunities as they present themselves and deal with them in a positive and active (not reactive) manner.

Therefore, I ask your endorsement for the program for the coming year which will be presented at the convention. It is to strengthen both the components and our association.

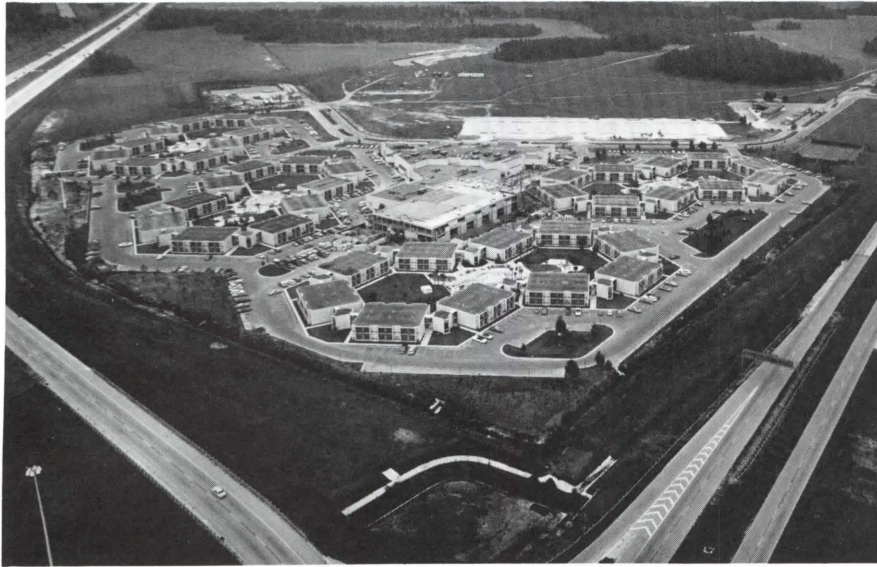
See you at the convention.

Nils M. Schweizer, FAIA

A large, stylized handwritten signature in black ink, likely belonging to Nils M. Schweizer.



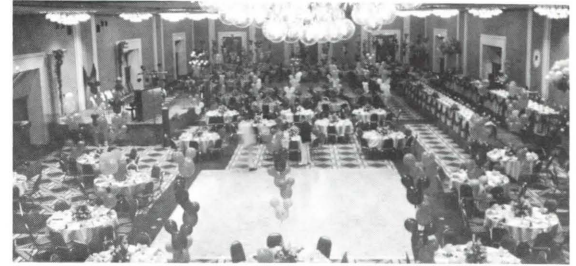
# CONVENTION AT THE HYATT HOUSE



Aerial view of the Orlando Hyatt House complex



Limey Jim's is a mecca for lovers of the good life



The spacious Convention Center (Cypress Ballroom)

The Orlando Hyatt House, located in Kissimmee, Florida at Walt Disney World's doorstep, is the perfect location for the Association's 61st Annual Convention.

As the aerial photograph shows, the clustered Hyatt complex is nicely self-contained but with quick access to both U.S. 192 and Interstate 4.

The Mid-Florida Chapter, AIA recognized the Hyatt House and the architectural firm, Reynolds, Smith & Hills, Architects/Engineers with an Award of Merit in 1974. That same year, W. Edward Bell, Superintendent of the J.A. Jones Construction Co., was recognized with a Craftsmanship award for the lighting design of the lobby, lounge and restaurant.

Limey Jim's Show Lounge will offer a relaxing interlude to what will be a full convention schedule.

The massive exhibit area and banquet hall will provide ample space for all convention activities.

The Orlando Hyatt House promises to be exciting and at the same time convenient for all delegates, speakers and exhibitors.

So, whether in the Convention Center, Limey Jim's, The Beef Block, the Shopping Mall, one of the eight Pools, the lighted tennis courts or exhibit hall, the Orlando Hyatt House is the place to be October 2 - 5, 1975.

## Advertisers

Architectural Products .....	31
Cabot's Satin .....	(second cover) 2
Construction Products Division W.R. Grace & Co. ....	10
Dunan Brick .....	(third cover) 35
Orlando Hyatt House .....	(fourth cover) 36
Paver Systems .....	29
Pavlow Office Furniture .....	34
PPG .....	30
Professional Services .....	34
Safe-T- Lawn .....	11
Solar Development .....	33
Universal Building Specialties .....	27
Western Waterproofing .....	23

## Letters

Dear Editor:

I have received the copies of the *Florida Architect* which you sent. Thank you very much. Also, please convey my thanks and appreciation to your illustrator who did the clever illustration.

Again, thank you for the opportunity of contributing to your magazine.

Very truly yours,

John Turner, Director  
Planning and Research  
Santa Fe Community College

Dear Editor:

Way back — some months back — your excellent magazine had a most interesting article on how buildings weren't built to the specifications of man, etc. We wanted to excerpt or run a reprint of it... but lost our copy.

Could you dig it out, send it — give us reprint permission or refer to author with our request to reprint?

Sorry I have to be so vague in description.  
Best wishes,

David R. Arpin  
Executive Vice President  
FHMA

**THE FLORIDA ARCHITECT** encourages communications from its readers and reserves the right to edit for style and/or economy. We assume that any letter, unless otherwise stipulated, is free for publication in this journal. Please address correspondence to: Editor, **THE FLORIDA ARCHITECT**, 7100 N. Kendall Dr. No. 203, Miami, Florida 33156.



**IMPACT**

**1975**

**CONVENTION**

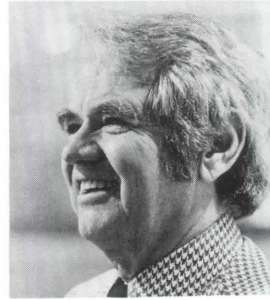
**PROGRAM**

## Thursday, October 2, 1975

- 10:00 a.m. — 6:00 p.m. Registration (Tamiami Lounge)
- 10:00 a.m. — 1:45 p.m. Accreditation of Delegates (Tamiami Lounge)
- 11:00 a.m. — 1:00 p.m. FAAIA Board of Directors Meeting (Lauderdale)
- 2:00 p.m. — 4:00 p.m. FAAIA Business Session (St. Cloud)  
Florida Region Business Session
- 4:15 p.m. **7 IMPACTS**

Speaker: William W. Caudill, FAIA (St. Cloud)

Moderator: Weld Cox



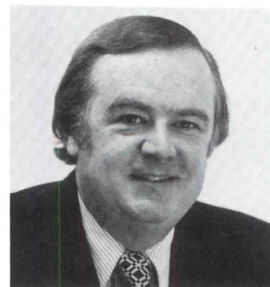
William W. Caudill, FAIA, Chairman of the Board, Caudill Rowlett Scott Inc., has been a proponent of the team concept of architecture since he and John Rowlett formed the first team in 1946. Three years later the firm was formed and McCaull has served as a principal of this team of architects, planners and engineers ever since.

Mr. Caudill was Director of the School of Architecture at Rice from 1961 to 1969 and also held that school's William Ward Watkin Chair until 1971. He is now serving as a member of the Board of Directors of Herman Miller Inc. and as a Director of Rice University Center for Community Design and Research.

- 6:30 p.m. — 8:30 p.m. Official Opening of Building Products Exhibits — Salute to Exhibitors (Cypress Ballroom)
- Evening On Your Own  
Hospitality Suites

## Friday, October 3, 1975

- 8:00 a.m. — 9:30 a.m. Coffee & Danish with Building Products Exhibitors (Cypress Ballroom)
- 8:30 a.m. — 5:00 p.m. Registration (Tamiami Lounge)
- 8:30 a.m. — 2:00 p.m. Balloting for FAAIA Officers & Florida Regional Director (Tamiami Lounge)
- 8:30 a.m. — 9:30 a.m. AIA Leadership Workshop Session No. 1 Chapter/Section Vice Presidents (St. Petersburg)
- 9:45 a.m. — 11:30 a.m. **IMPACT OF CONSTRUCTION MANAGEMENT (St. Cloud)**
- Speaker: George T. Heery, FAIA  
Moderator: Weld Cox



George T. Heery, FAIA, is President and Chairman of Heery & Heery, Architects and Engineers, founded in 1945 in Athens, Georgia. He is also President of the firm's Construction Program Management subsidiary, Heery Associates, Inc., chartered in 1966.

Mr. Heery and the firm have been considered leaders in developing the new profession of construction management.

Mr. Heery has authored several professional journal articles and has just published his first book, *Time, Cost and Architecture*, published by McGraw-Hill of New York.



30 a.m. — 2:00 p.m.

Buffet Luncheon with Building Products Exhibitors (Cypress Ballroom)

30 p.m.

**ENERGY CONSERVATION EXPERTISE — A NEW BUSINESS OPPORTUNITY FOR THE ARCHITECT** (St. Cloud)

Speaker: P. Richard Rittlemann, AIA  
Moderator: Weld Coxe



P. Richard Rittlemann, AIA, is a principal with Burt, Hill & Associates of Butler, Pennsylvania. He has been with the firm since 1967. Mr. Rittlemann is a 1961 graduate of Rensselaer Polytechnic Institute, Troy, N.Y., with a BA in Architecture.

Mr. Rittlemann, a member of the NASA/NSF Solar Energy Panel, has worked on the design and implementation of several solar projects such as, Sugarmill Woods in Florida, Atlanta School in Georgia and the State University in New York.

Mr. Rittlemann was the author of "The Solar Utilization Guide," for the GSA publication, *Energy Conservation Guidelines for Office Buildings*.

00 p.m.

**IMPROVE EARNINGS BY IMPROVING MANAGEMENT SKILLS** (St. Cloud)

Speaker: Tom J. Eyerman  
Moderator: Weld Coxe



Thomas J. Eyerman, AIA, is a General Partner with the firm, Skidmore, Owings & Merrill of Chicago, Illinois. Mr. Eyerman is involved with the business management of SOM.

He recently managed the business aspects of the Joint Ventures performing the Crosstown Expressway for the City of Chicago.

Mr. Eyerman received a master of business administration degree from Harvard Graduate School of Business Administration in 1965.

30 p.m. — 6:30 p.m.

Refreshments with Building Products Exhibitors (Cypress Ballroom)

30 p.m.

Briefing for Participants/Underground tour of Disney World (St. Cloud)

45 p.m. — 8:30 p.m.

Underground Tour of Disney World (buses depart at 6:45 p.m.)

aning

On Your Own  
Hospitality Suites

**Tuesday, October 4, 1975**

00 a.m. — 10:00 a.m.

Coffee & Danish with Building Products Exhibitors (Cypress Ballroom)

30 a.m. — 12 noon

Registration (Tamiami Lounge)

30 a.m. — 9:45 a.m.

AIA Leadership Workshop Session No. 2 — Chapter/Section Vice Presidents (St. Petersburg)

10:00 a.m. — 12 noon



**MAKING INTERVIEW PRESENTATIONS MORE EFFECTIVE**

Speaker: Weld Coxe

Weld Coxe established his practice as a Management Consultant in Communication in 1967 after an 18 year career in professional business development, corporate public relations and journalism.

In his business, Mr. Coxe has specialized in providing consulting service in marketing and management to architects and engineers. The firm of Weld Coxe Associates currently has clients in 25 states and also in Europe. Mr. Coxe is author of *Marketing Architectural and Engineering Services*, published in September 1971 by Van Nostrand Reinhold Company.

In addition to his consulting practice, Mr. Coxe is also editor of *The Coxe Letter*, a monthly report of trends in the marketplace of architectural services.

12 noon — 2:00 p.m.

Buffet Luncheon with Building Product Exhibitors (Cypress Ballroom)

2:00 p.m.

Exhibits Close

2:30 p.m. — 4:00 p.m.

Epilogue of Convention Program (St. Cloud)

Moderator: Weld Coxe

Panel: George Heery, P. Richard Rittlemann, Tom J. Eyerman

4:00 p.m. — 6:30 p.m.

AIA Leadership Workshop Session No. 3 — Chapter/Section Vice Presidents (St. Petersburg)

7:30 p.m.

Annual Awards Banquet (Cypress Ballroom)

1975 Architectural Awards  
FAAIA Honors & Awards

**FUTURE OF THE PROFESSION**

Speaker: Louis deMoll, FAIA  
President-Elect AIA



Louis deMoll, FAIA, was elected First Vice President and president-elect of The American Institute of Architects during the AIA's 1974 convention. He will succeed to the presidency in December, 1975. Mr. de Moll also served as a national Vice President of the Institute in 1972 and 1973, and as chairman of the Commission on Institute Affairs during 1974.

Mr. deMoll is Chairman of the Board of the Ballinger Company, a Philadelphia architectural and engineering firm that he has been associated with since 1955. His architectural work has received numerous awards from the Pennsylvania Society of Architects and the Philadelphia Chapter, AIA, as well as design awards from *Progressive Architecture* magazine. In 1965 he was honored for his professional achievements by being elected to fellowship in The American Institute of Architects.

**Sunday, October 5, 1975**

10:00 a.m. — 12 noon

FAAIA Business Session (Ft. Lauderdale)  
FAAIA Board of Directors Meeting

# BUILDING PRODUCTS EXHIBITORS

## 308 American Forest Products Corporation

P.O. Box 21126  
Ft. Lauderdale, Florida 33316  
(305) 522-8522  
*Bond-Deck panelized roof decking*

## 408 Architectural Products Consultants

4101 Salzedo Street  
Coral Gables, Fl. 33146  
(305) 445-1435  
*Form & Surfaces Products — Doors — Panels — Planters — Benches in carved woods-Bronze, etc.*

## 503 Bradenton Stone Quarriers — American Stone Corporation

4921 15th Street, East  
Bradenton, Fl. 33507  
(813) 756-9586  
*Florida Travertine Limestone products plus various sealers and water repellants*

## 507 Bradley Corporation

W142 N9101 Fountain Boulevard  
Menomonee Falls, Wisconsin 53051  
(414) 251-6000  
*Washfountains, showers, safety equipment, accessories*

## 601 Bradley Plywood Corporation

P.O. Box 1408  
Savannah, Georgia 31402  
(912) 233-3575  
*Bradley Cypress Exterior Plywood siding;  
Bradley pre-finished paneling (Beauty-wall and Forest-wall)*

## 204 Robert Duncan Braun, APA: Architectural Photographer

P.O. Box 1677  
Winter Park, Fl. 32789  
(305) 644-2124  
*Architectural Photography and photographic techniques of benefit to the architect in promotion, record and decor.*

## 303 Cast-Crete Corporation

P.O. Box 11497  
Tampa, Fl. 33680  
(813) 621-4641  
*Architectural precast concrete and concrete products, i.e., Joist, Beam Soffits, Periform, Sills and Lintels.*

## 301 Commercial Modernfold of Orlando, Inc.

107 P.O. Drawer H  
Fern Park, Florida 32730  
(305) 671-4463

**Commercial Modernfold of Jacksonville**  
Jacksonville, Florida

**Don Works Modernfold**  
Ft. Lauderdale, Florida

**Acousti-Engineering Co.**  
Tampa, Florida  
*Divisiflex and Soundmaster*

## 302 Commercial Systems Division Commercial Roof Decks of Jacksonville

1515 Tutter Street  
Jacksonville, Fl. 32211  
(904) 743-5222  
*Steel Stud Systems*

## 104 Construction Products Division (Zonolite) W. R. Grace & Co.

321 Whooping Loop  
Altamonte Springs, Florida 32701  
(305) 830-5151  
*Zonolite Insulating Concrete Roof Decks, Thermoclad, Monokote Fireproofing Materials and other insulation products*

## 703 Del Mar Woven Wood

7411 Lorge Circle  
Huntington Beach, California 92647  
(714) 842-4444  
*Woven wood shades, draperies, room dividers, folding doors*

## 402 Dwyer Products of Florida

255 Ottley Drive  
Atlanta, Georgia 30324  
(404) 875-8171  
*Dwyer Compact Porcelain Kitchens*

## 702 Emco Plastics, Inc.

Rt. 3, Box 239  
Bartow, Florida 33830  
(813) 533-3364  
*Seamless Safe Pans for Shower Stalls*

## 704 Floridale Products, Inc.

705 525 S. Andrews  
Ft. Lauderdale, Florida 33301  
(305) 524-8549  
*Pella windows, sliding glass doors and folding doors*

**Florida Central Chapter Auxiliary**  
Sanford Goin Memorial Fund

**Florida South Chapter  
Women's Architectural League**

## Florida Political Action Committee

7100 N. Kendall Dr., Suite 203  
Miami, Fl. 33156  
(305) 661-8947

## 105 General Electric Company

5266 Highway Avenue  
Jacksonville, Florida 32205  
(904) 783-1000  
*General Electric Weathertron (Heat Pumps)*

## 103 Gory Associated Industries, Inc.

1773 N.E. 205th Street  
Miami, Florida 33179  
(305) 651-7611  
*Concrete Roof Tile*

## 406 Graphic Systems, Incorporated

601 N. Ferncreek  
Orlando, Fl. 32803  
(305) 898-8392  
*Architectural signing, directories, and related products*

**805 Heywood-Wakefield Company**

3010 10th Street  
Menominee, Michigan 49858  
(906) 863-2661

*Movable classroom furniture, lecture room and auditorium seating*

**306 Hymar Stone Corporation**

P.O. Box 484  
Lakeland, Fl. 33802  
(813) 686-4296

*Buckingham Virginia Slate and natural stone products.*

**701 Kawneer Company**

P.O. Box 516  
Jonesboro, Georgia 30236  
(404) 478-8841

*4000 series doors/Panic guard entrances; V.H.M.*

**407 Keeman Brick of Central Florida, Inc.**

P.O. Box 398  
Altamonte Springs, Florida 32701  
(305) 831-1050

*Brick and related material*

**802 Lake Shore Markers, Inc.**

654 W. 19th Street  
Erie, Pennsylvania 16512  
(814) 456-4277

*Lifetime aluminum signs, markers, building letters, plaques, letterlites, incandescent lighting products*

**405 Leaf Fiberglass**

17900 S.W. 216th Street  
Goulds, Florida 33170  
(305) 247-1151

*Fiberglass planters and landscapers*

**404 Lees Carpets**

Valley Forge Corporate Ctr.  
King of Prussia, Pennsylvania 19406  
(215) 666-7770

*Commercial carpet for schools, hospitals, offices*

**304 Libbey-Owens-Ford Company**

1819 Peachtree Road, N.E.  
Atlanta, Georgia 30309  
(404) 355-2410

*Vari-Tran Reflective Glass*

**202 Medeco Security Locks, Inc.**

P.O. Box 1075  
Salem, Virginia 24153  
(703) 387-0481

*High security U. L. Listed locks and lock cylinders*

**201 Mercer Plastics Co., Inc.**

1 Jabez Street  
Newark, New Jersey 07105  
(201) 589-4444

*Mirror Finish Wall Base, Commercial Wall Base, Stair Treads & Nosings, Corner Guards, Door Saddles, Vinyl Edges & Nosings for Carpeted Floors*

**403 Miller Associates  
a Division of Hill Bros., Inc.**

2605 N.W. 75th Avenue  
Miami, Florida 33122  
(305) 592-6440  
TWX (810) 848-5883

*Hydrotherapy Health Spa*

**305 Nutone Division of Scovill**

Madison & Red Bank Roads  
Cincinnati, Ohio 45227  
(513) 527-5409

*Sterling Lighting, NuTone Electrical Built-Ins*

**502 Office Suites, Inc.**

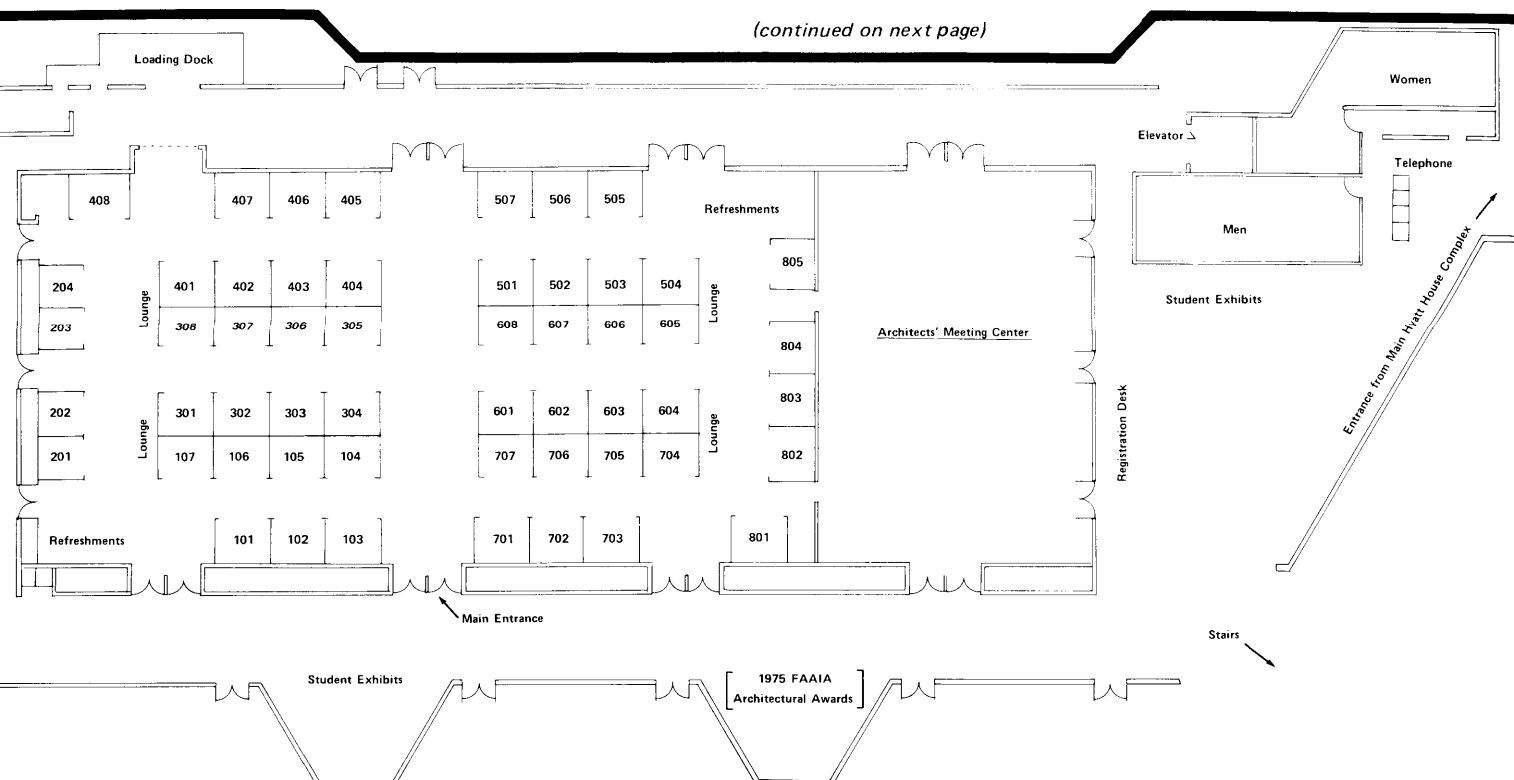
359 N. Wells Street  
Chicago, Illinois 60610  
(312) 467-6290

**707 PPG Industries**

One Gateway Center  
Pittsburgh, Pa. 15222  
(412) 434-2891

*PPG Performance Glass, PPG Mineral Products*

(continued on next page)





A proven, certified Zonolite Roof Deck, nationally backed by W. R. Grace & Co. certainly gives you your money's worth in value. And more:

1. Your Zonolite Roof Deck is applied by a professional, substantial, established Florida business firm. A business run by men who stand behind and certify their work, men who are ready to serve you any time.

2. Your Zonolite Roof Deck incorporates three major design improvements. A new, slotted metal base (over which other roof decks can't be poured), new Insulperm® insulation board, and new Zonolite Base Ply Fasteners. All three speed drying, permit the application of built up roofing within 48 hours.

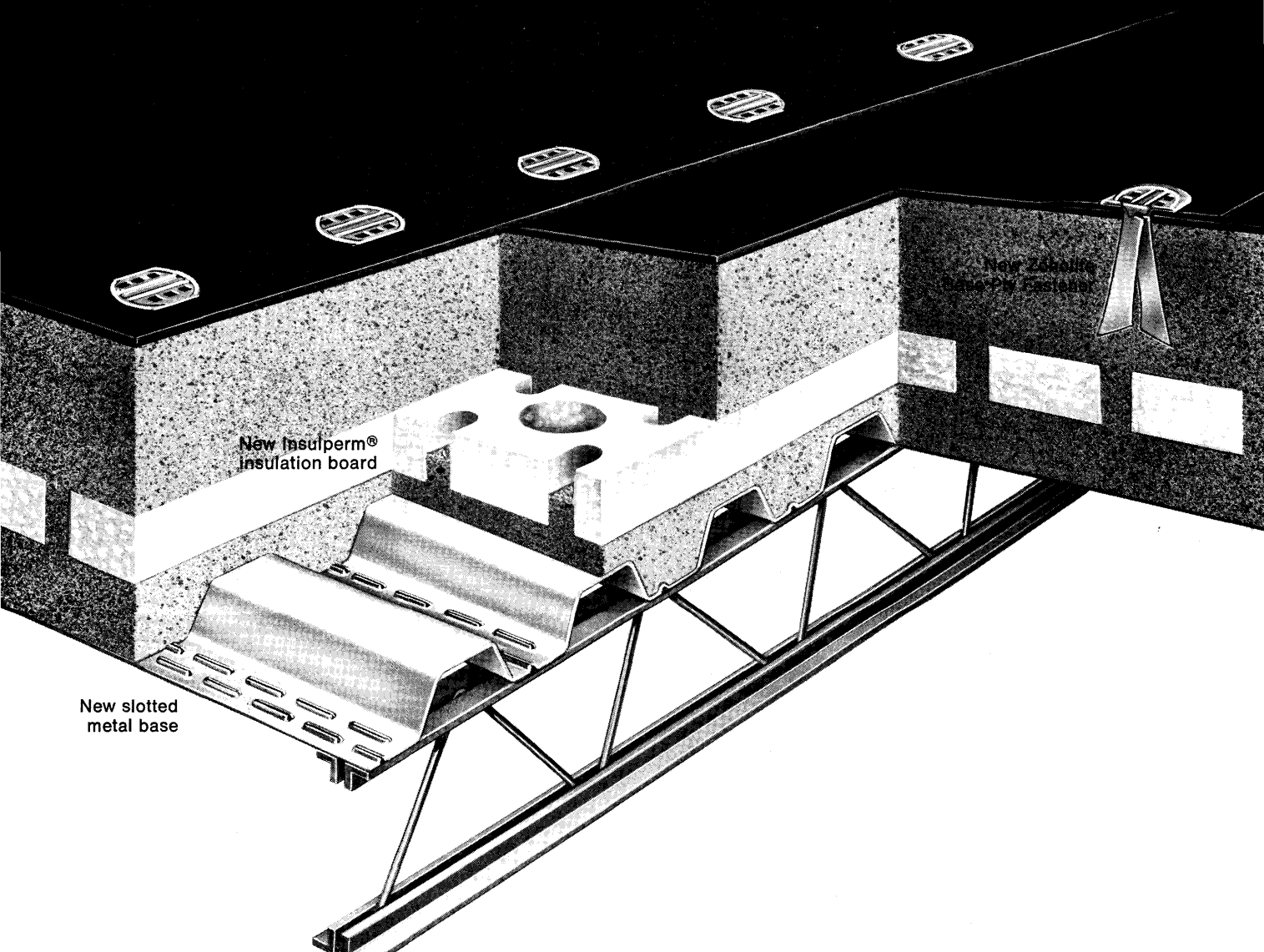
3. Zonolite Roof Decks meet strict new U values and have earned Factory Mutual's Class I rating for fire and wind resistance. These are important whether you're just after "shade

and shelter" or whether you want a completely insulated building.

It doesn't take a very hard look to see that Zonolite Roof Decks represent a great value in dollars and sense. Construction Products Division, W. R. Grace & Co., 321 Whooping Loop, Altamonte Springs, FL 32701.

# GRACE

## New, improved Zonolite Roof Decks give you your money's worth...and more!



**203 Paver Systems, Inc.**

1800 4th Avenue, North  
Lake Worth, Florida 33460  
(305) 585-5587

*Interlocking paving block "LOCKBLOCK",  
New Paving System "TURFBLOCK"*

**804 Safe-T-Lawn, Inc.**

7800 N.W. 32nd Street  
Miami, Florida 33122  
(305) 592-0801

*Irrigation Equipment*

**801 Southeast Lathing & Plastering Bureau, Inc.**

3177 Petite Forest Drive, N.E.  
Marietta, Georgia 30060  
(404) 973-1137

*Exterior stucco textures for Exterior Wall Systems  
Interior veneer plaster systems*

**101 Stratton Industries, Inc.**

P.O. Box 1007  
Cartersville, Georgia 30120  
(404) 382-9350

*Contract/Institutional Carpet and  
Hush-Wall Division Acoustical Wall Carpet*

**602 Thomas W. Ruff & Company of Florida, Inc.**

**603** 501 George Avenue, East  
**604** Maitland, Florida 32751  
**706** (305) 628-2400

*Business and contract furnishings-office furniture  
contract furniture, carpet-drapes, etc.*

**605 Venetian Marble Products, Inc.**

P.O. Box 5967  
Pompano Beach, Florida 33064  
(305) 943-0200

*Family of reconstituted marble products featuring a  
built in whirlpool system in modular bathtubs*

**106 Western Waterproofing Co., Inc.**

4924 LaSalle  
Tampa, Florida 33607  
(813) 877-7646

*Waterproofing and Deck Coating*

**401 The Seabridge Company**

6407 Georgia Avenue  
West Palm Beach, Fl. 33405  
(305) 585-3606

*Chicago Faucets; Symmons non-scald showers; Jensen  
Stainless steel sinks; Kelsey-Hayes Dura-Lav*

**803 Wimer-Stubbs Associates, Inc.**

P.O. Drawer W  
Deland, Fl. 32720  
(904) 734-5235

*Auditorium seating, stadium seating, Science (lab  
furniture), Gym lockers, gym flooring, interior moveable  
partitioning, Decorative concrete surfaces*

**501 Wrono Enterprise Corporation**

**608** 208 N.W. 5th Avenue  
Hallandale, Florida 33009  
(305) 921-6574

*Aluminum Wrol-Up Shades and Thermo-Wrol Shutters*


**Advanced Engineering**

Safe-T-Lawn is constantly a step  
ahead of your growing needs,  
so we can solve all your  
irrigation problems.

**Quality Performance**

Every S-T-L Sprinkler Head is designed for  
underground installation. The only time you  
can see our heads is in actual operation. We have  
a complete line for every area that requires irrigation--  
whether it's a golf course, park or residential location.

**S-T-L HAS AN UNBEATABLE COMBINATION**

 **Irrigation Equipment Manufacturers**  
**SAFE-T-LAWN, INC.** 7800 N.W. 32 Street • Miami, Florida • 592-0801

---

# Energy and Architecture in Florida

By Nils M. Schweizer, FAIA

## PART I

As an architect, I have been concerned about both the **natural** and man's constructed environments. In the energy crises these have come together head on. I say crises because while the scarcity of fossil fuels represent one alarming aspect of the problem; the other side of the coin involves the serious aspects of a social structure, seemingly determined to waste energy resources in every sense of the word. Both the waste of energy and degradation of resources are becoming a specter of our time and this is primarily due to the habits programmed into our psyche by the long history of cheap subsidized energy and the seeming supremacy of the vast industrialization which made this country a world power. Well, all that is over. The dollars and efforts we will spend in the next fifteen to twenty years, both public and private, for simply energy, **that will be wasted**, will be massive; unless we are willing to begin to conserve.

I would like to address the energy issue in terms of that which may be saved in the structures we have created and will continue to create.

We have come to understand that 33% of the total energy used in this country is in the maintenance of our structures; residential, commercial and institutional. Energy demand could be reduced by introducing retrofitting programs by approximately 30% (at this time this is wasted energy) and in the construction of new buildings as high as 80% over previously built structures. If we re-visit, finetune and use energy conservation measures, then we take some averages of these. If we retrofit our buildings (using the 30% figure) and create new buildings that have a 60% savings over 7 years ago in our new buildings, by 1990 we could appreciate 12.5 million barrels per day of petroleum.

We now invest vast quantities of our dwindling capital resources in strategies which have less potential, less certainty and longer delayed pay-offs.

With our heavy reliance on foreign oil in this state, we must begin to create energy efficient buildings of all types.

There is today in this state a piece of legislation which talks to lifecycle cost analysis. This Act is called the **Florida Energy Conservation in Buildings Act of 1974**. This piece of legislation is **Senate Bill 733** passed in the legislature in 1974. It directs the Department of General Services to promulgate rules for conducting lifecycle cost analysis of alternative architectural and engineering designs on all state owned buildings; requiring an energy performance index. The lifecycle cost analysis is basically a design tool to evaluate the energy efficiency of all known materials and mechanical systems in the buildings to promote energy conservation and design. It is defined as the cost of operating and maintaining the facility over the life of the structure. The life of the structure in this case means anywhere from 40-60 years. However, I have the feeling in the back of my mind that the structures which we build today must last not 20-40 years as we have been building them, but they must last and be useful as high as 100 years. This calls for both long lasting materials and flexibility in the structures.

Today the Department of General Services has created a system whereby this lifecycle cost analysis may be measured on a performance standard basis, and to this end they have created three documents. The first document is the Florida Energy Conservation Manual which is basically the establishment of energy performance indices (EPI). Each index will establish the permissible use of energy, in a given type of building, measured in BTU (per thousand gross

square feet per year). Any building found to exceed this budget must be redesigned until that energy budget is met. The second document consists of the Florida Lifecycle Analysis Manual. This document prescribes a method for the architect and the engineer by which to establish the EPI for that building in the schematic and preliminary design phases. The main tool of this procedure is a computer program named Florida Lifecycle Energy Environment Technique (FLEET). The third document is the Computer Program User Manual. The procedure proposed would be a mandatory requirement for all state owned facilities 5,000 square feet or larger and small spaces leased by the state in size of 20,000 square feet or more. It must be understood that the lifecycle cost analysis is only the first of ways we are beginning to find where energy may be saved in which this program of conservation may be served. It is extremely important that this program be supported and that we are able to have time to work out wrinkles. At least it is headed in the right direction in terms of our profession, (performance standards rather than prescriptive).

The American Institute of Architects report dealing with "A Nation of Energy Efficient Buildings by 1990", estimated that the consumer dollars required to buy the energy which will be wasted because of non-energy efficient buildings, assuming they continue to be built and assuming that we continue to use the buildings as they now stand, will be between 892 billion and 1,499 billion dollars for the fifteen year period ahead.

It therefore becomes obvious that we must begin to produce methods by which we can deal with this problem. The lifecycle cost analysis is one of those methods. It deals with many factors in a building; the number of stories, the shape of the building, the orientation of the insulating properties of walls, roofs and floors, proportion of window area to wall area, shading coefficients, etc.

The rest of this article will touch briefly on the many aspects of conservation in buildings in the following areas:



1. Retrofitting or What is possible in existing building.
2. Design parameters for new construction.
3. A brief glimpse into the future of possible alternative sources.

## Retrofitting

We begin with retrofitting an energy conservation measure which has two sub-headings or criteria definitions. One is "leak plugging" and the other is "belt tightening". An example of this in transportation is as follows: Belt tightening simply means to go to work on foot or ride in a motor pool. An example of leak plugging means to tune the car to improve its gas mileage. We will discuss both of these areas in retrofitting, remembering that each building has unique properties.

The first area I wish to discuss is **electric heating**. Resistance electric heating is popular simply because of the low first cost. However, it is generally extravagant and inefficient. Normally the traditional practice has been to provide higher standards of thermal insulation so that heating cost would be competitive. These systems, when they are used, need to be reviewed for long time alternatives. If a system of this kind is in an existing building, to be remodeled, it would be advisable to contact the engineer who specified the equipment and discuss with him the possibilities of alternatives. The low first cost factor that we once enjoyed is no longer valid in the foreseeable future.

**The reduction of glazed areas.** It might be advisable to simply remove and replace any glass incidental to a heavy solar gain. The replacement would be with properly insulated materials. If this is not possible then either absorbing or reflective glass may be used to advantage. It is also possible to use heavy draperies, specially manufactured solar blinds or glass coating such as Solar-X.

**Infiltration and ventilation** — Leakage of air to the outside can be substantially cut with effective weatherstripping. As ventilation standards lower, you need to

begin to check out the equipment with a qualified engineering consultant, preferably the designer of the system, to see if there are any advantages in the lowering of these standards for you. This is important particularly when it comes time to replace compressors in A.C. systems. There are significant amounts of tonnage to be cut in terms of lowering ventilation standards. (In a book published in 1953 by the O'Conner Engineering, Inc., it talks about air conservation engineering which discusses air recovery equipment, catalytic combustion, as well as savings through air conservation. The Conner filter was developed so that virtually no outside air was required for a building system. However, in 1953 the recovery or reclamation of air was beyond imagining for most people). With more and more pollutants in our exterior air, the problem comes closer to home.

**The stack affect in infiltration** — In tall buildings substantial amounts of infiltration at ground level entrances and the creation of vertical convection currents occur. In this instance it is necessary to create air locks, vestibules and perhaps a series of doors. The old revolving door would be a significant contribution to solving this problem and in our climates in Florida, much air conditioning is lost as is heat in northern climates with freezing temperatures.

**Heat exchangers** — These are devices that can recapture the heat or cool from a building and transfer this same rejected heat or cool to the incoming air supply which also can begin to contribute to saving significant amounts of energy.

**Functional change** — There should be a recognition in changing conditions or functions in the use of spaces which can lower energy costs in many ways, particularly in remodeled spaces. Perhaps, this is a significant area of alternative practice.

**Colors and surfaces** — Particularly surfaces to be repainted in Florida should be painted in light colors as heat reflecting surfaces rather than heat absorbing surfaces.

**Lighting** — It is interesting to chart the lighting standards of schools for the past 50-75 years or in this century. Before 1910 the schools required 3 foot candles. Between 1910 and 1930 the figure rose to 18 foot candles. From 1930 to 1950 the figure rose to 30 foot candles; from 1950 to 1975 the figure rose from 70 foot candles to 150 foot candles depending upon the task. If we lowered requirements of 150 foot candles to 50 foot candles we would create a 90% reduction in energy consumption in these lamps.

It is also a fact that fluorescent lamps are three times as efficient as incandescent lamps. Something that is not much discussed is high frequency light which occurs at 3,000 cycles per second as opposed to the 60 cycles per second. This cuts operating costs and improves lamp life and performance. Both the General Services Administration and the National Bureau of Standards estimates the reduction in lighting may be as high as 15% in existing buildings (minimum) and 25% in new buildings (minimum).

The opportunities for retrofitting are valid in terms of our practices. Let's get with it. It's fast becoming a total world. Private business, state or local government could reduce energy consumption by better than 15% without any resulting increase in labor costs by a management program consisting of: 1) proper automated data control centers; 2) instrumentation; 3) regular checking of weather seals, air leaks, etc.; 4) regular checking of leaking taps; 5) proper maintenance procedures; and 6) a program of machinery adjustment inspections.

At the beginning of this series I discussed what our habits have done to our psyche. We all know that we put on sweaters to go to the movies. Our attitudes toward the heating and cooling of our buildings must change. We must be able to set our thermometers at 78 in the summer and 68 in the winter. We are a nation of over-heated and over-cooled people.

*In "Energy and Architecture" Part II, Mr. Schweizer will discuss the role of New Structures Design and Future Alternative Energy Systems.*

# Who's Who at the Institute

## KEY WORD DIRECTORY TO INSTITUTE ACTIVITIES

### THE AMERICAN INSTITUTE OF ARCHITECTS

1735 New York Avenue, N. W.  
WASHINGTON, D. C. 20006  
(202) 785-7300

*The following list is provided for those who wish information, opinions, or analyses on the indicated subjects from Institute staff in Washington.*

SUBJECT	STAFF	TELEPHONE (202 area code) (785 exchange)		
Accounting for Architectural Office	Alan B. Stover	7254	Audio Tape Cassettes	Sandy Kashdan 7357
Accounting System Computerized (use of)	Edward G. Petrazio, AIA	7250	Audiovisual Materials	Kathy Kalt 7295
Accreditation of Architectural Schools	Dr. Hugo Blasdel, Executive Director, NAAB/ James E. Ellison, AIA	833-1180 7347	Automatic Practice Technology	Robert A. Class, AIA 7258
Advertising (AIA Journal)	Michael M. Wood	7282	Awards Programs	Maria Murray 7390
Advertising Campaign	Muriel Campaglia	7259	Baldwin Memorial Archives	Susan Cosgrove 7294
Advocacy	Robert T. Coles, AIA/ Harold Glover	7234 7229	Barrier-Free Architecture	Maurice Payne, AIA 7364
A/E Procurement in the States	Elizabeth Chalmers	7386	Black Executive Exchange Program (BEEP)	James E. Ellison, AIA 7347
A/E Selection	Arnold J. Prima, Jr., AIA	7374	Board of Directors	J. Winfield Rankin, Hon. AIA 7388
Affirmative Action	Robert T. Coles, AIA	7234	Building Codes & Regulations	James R. Dowling/ Thomas V. Tiedeman 7253
Agreements (AIA forms)			Building Management, Architectural	Robert A. Class, AIA 7258
Orders/Sales	Terry L. Peck	7327	Building Systems	Joseph A. Demkin, AIA 7252
Interpretations	Alan B. Stover/ Edward G. Petrazio, AIA	7254 7250	Building Types and Design Programs	Maurice Payne, AIA 7364
AIA Filing System	Robert A. Class, AIA	7258	Business Management Department	William G. Wolverton, Hon. AIA 7322
AIA/Ford Scholarship Program		7344	Business Management (office)	Robert A. Class, AIA 7258
AIA Foundation	Jeanne Butler, Curator/ Administrator	638-3105	Bylaws (Institute)	J. Winfield Rankin, Hon. AIA 7388
AIA Journal (see other listings under "Journal")			CACE & CACE Annual Meeting	Robert A. Harris, AIA 7378
AIA Minority/Disadvantaged Scholarship Program		7344	Careers in Architecture - Materials	Irma Brown 7348
AIA Research Corporation	John P. Eberhard, AIA	785-8778	Change of Address (written requests)	Tom Ainsworth 7335
Arbitration	Alan B. Stover	7254	Chapter Bylaws (component)	Robert A. Harris, AIA 7378
Architect/Owner Relations	Alan B. Stover	7254	Clearinghouse of State Legislation	Elizabeth Chalmers 7386
Architects in Government	Bruce H. Schafer/ Marshall E. Purnell	7382 7384	Climate Control Programs	Joseph A. Demkin, AIA 7252
Architectural Education Counseling	Education Director	7349	Codes and Regulations Center	James R. Dowling 7256
Architectural Secretaries Association	Terry L. Peck	7327	Codes and Standards	James R. Dowling/ Thomas V. Tiedeman 7253
Architectural Study Tours	Jacqueline Watson	7397	COFPAES	Arnold J. Prima, Jr., AIA 7374
Architectural Training Laboratories	Stuart W. Rose, Ph. D.	7354	College of Fellows	Jacqueline Watson 7397
Assistant Secretary of the Institute	J. Winfield Rankin, Hon. AIA	7388	Commission on Professional Practice	Edward G. Petrazio, AIA 7250
Assistant Treasurer of the Institute	William G. Wolverton, Hon. AIA	7322	Community Design Center Program (CDC)	Harold Glover 7229
Association of Collegiate Schools of Architecture, Inc. (ACSA)	David Clarke, Exec. Dir./ James E. Ellison, AIA	785-2324 7347	Community Development Act	Michael B. Baker, AIP 7359
Association of General Contractors	Edward G. Petrazio, AIA	7250	Community Services	Harold Glover 7229
Association of Student Chapters (ASC/AIA)	Student President/ James E. Ellison, AIA	7272 7347	Compensation System	Robert A. Class, AIA 7258
			Compensations Management	Robert A. Class, AIA 7258
			Competitions, Architectural	George E. Pettengill, Hon. AIA 7296
			Component Services	Robert A. Harris, AIA 7378
			Component Editors Conference	Evagene Bond 7267
			Component Gov't Affairs	Thomas Bennett 7385
			Component Grant Program	Evagene Bond 7267
			Component Presidents' Letter	Peggy McCarthy 7377

(Continued on FA/28)



## JURY

Marley Carroll, AIA  
Charlotte, North Carolina

Francis P. Gassner, FAIA  
Memphis, Tennessee

Harry A. Golemon, FAIA  
Houston, Texas

## Merit Award

Hilltop Residence  
Central Florida  
Architect: William Morgan Architects, P.A.

Oceanfront Condominium  
Ocean City, Maryland  
Architect: William Morgan Architects, P.A.

West Residence  
Sarasota, Florida  
Architect: West & Conyers/Architects and Engineers, Inc.

Dake Residence  
Jacksonville, Florida  
Architect: Robert C. Broward, Architect

Renovation of Douglas Center  
Coral Gables, Florida  
Architect: Ferendino/Grafton/Spillis/Candela  
Architects Engineers Planners

Lee Residence  
Miami, Florida  
Architect: Borroto & Lee, Architects and Planners

## Honorable Mention

Klein Residence  
Miami, Florida  
Architect: Donald Singer, AIA

Francis Bellamy Elementary School  
Tampa, Florida  
Architect: Rowe/Holmes Associates Architects, Inc.

FAIA  
ARCHITECTURAL  
AWARDS  
1975

## HILLTOP RESIDENCE Central Florida

Architect: William Morgan Architects, P.A.  
220 East Forsyth Street  
Jacksonville, Florida 32202

Structural Engineer: Haley W. Keister

Builder: Howard Woodward

The problem was to create a hilltop residence without disturbing the natural contour of the hill. Also needed was to provide panoramic views of citrus groves in the rolling terrain below.



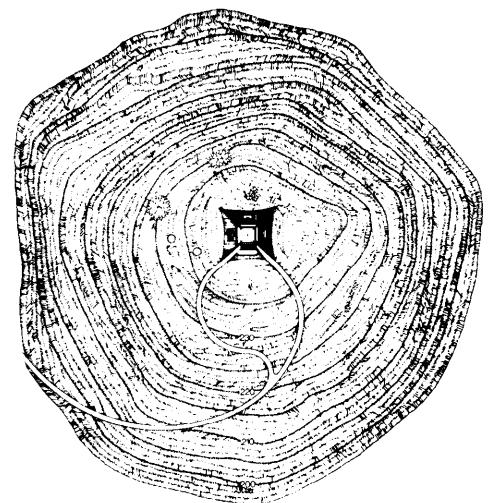
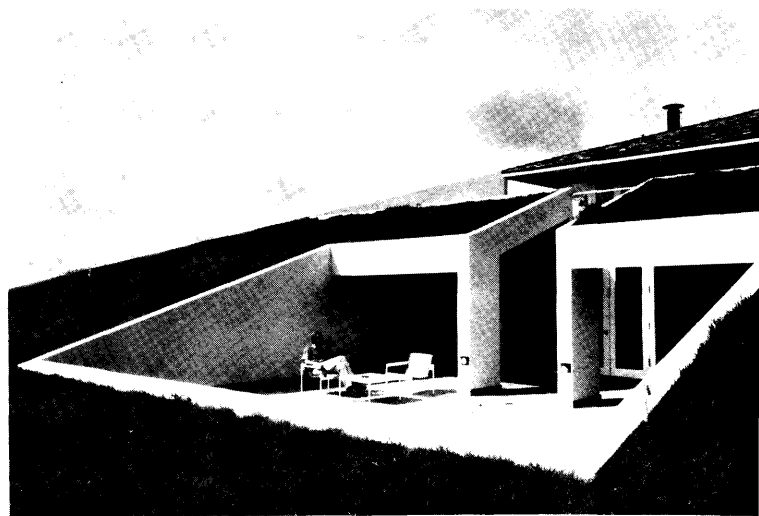
## Merit Award

### Jury Comments:

*The Hilltop Residence shows a very strong original concept. It is essentially simple and consistent but at the same time affords a variety of spacial and visual experiences.*

*It is obvious that this unique design was developed for a particular individual. It reflects the client's needs and aspirations as well as the creativeness of the architect.*

*This exceptional building has a sense of form approaching pure sculpture.*



SITE





# Merit Award

## Jury Comments:

*The Oceanfront Condominium shows great ingenuity. It is a very original solution to a problem that frequently produces mediocre results. The concept dominates the surroundings but is creative in plan and in sculptural form.*

*This project is a powerful sculpture but does not violate structural integrity or lose individual scale.*

*One juror had serious questions about the responsibilities (social and ecological) of this project.*

## OCEANFRONT CONDOMINIUM Ocean City, Maryland

Architect: William Morgan Architects, P. A.  
220 East Forsyth Street  
Jacksonville, Florida 32202

Structural Engineer: Sherrer-Bauman & Associates

Consulting Engineer: Horst Berger  
Geiger-Berger Associates, P. C.

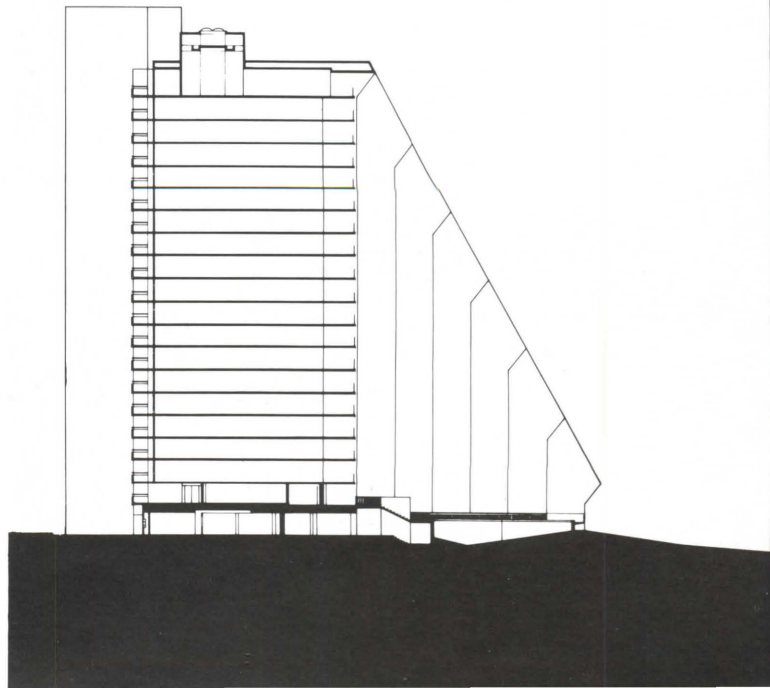
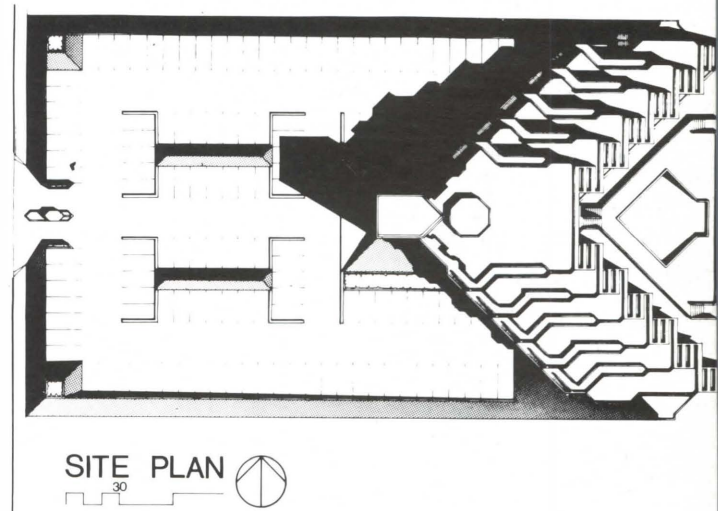
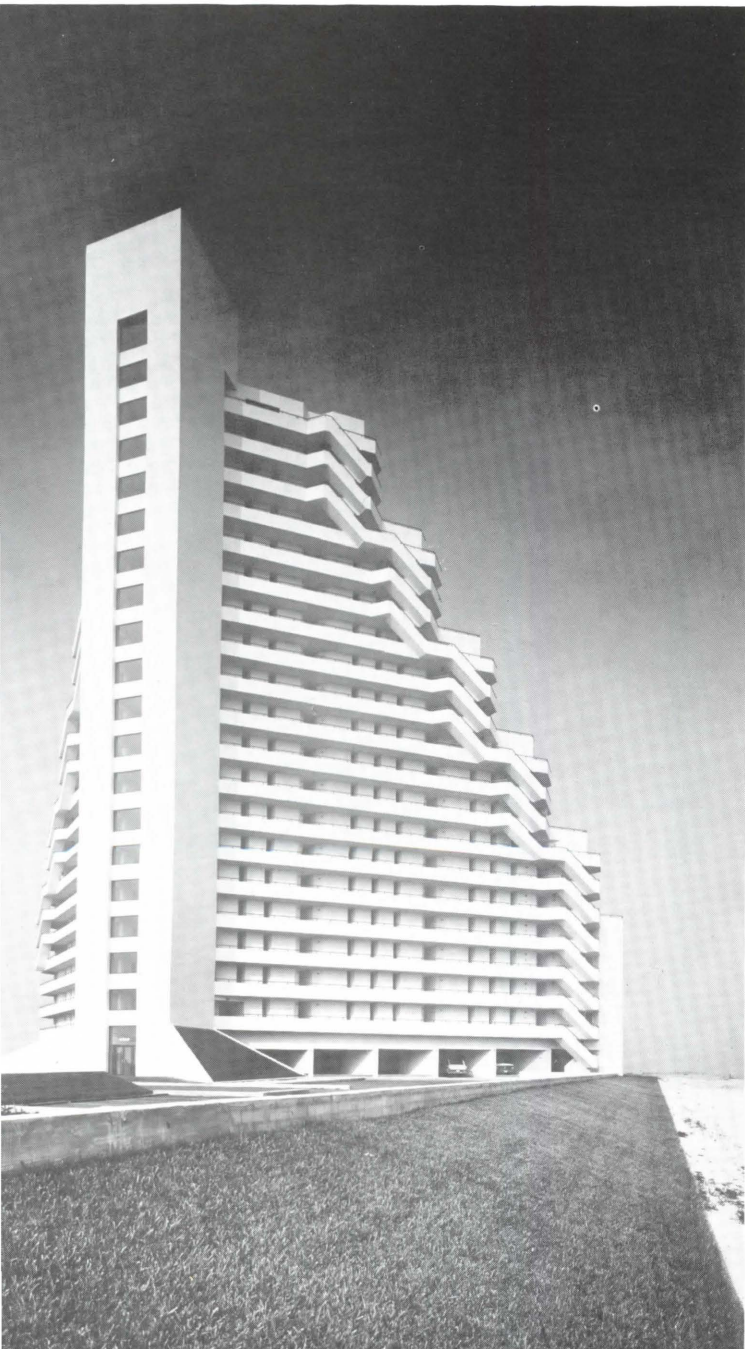
Lighting Consultant: William Lam Associates, Inc.

Mechanical Engineers: Atchison and Keller, Inc.

Owner: Mr. John S. Whaley

Contractor: The Farms Company

The problem was to provide a variety of living units with direct views of the ocean, all units with oceanfront balconies and a limited number of units with large terraces.



All exterior walls are "Ocala block," concrete block with a natural limestone aggregate. The glass in the West residence is solar bronze set in aluminum frames of medium bronze anodized aluminum.

# Merit Award

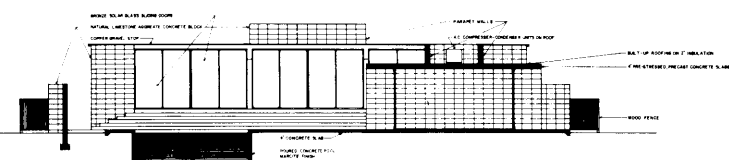
**Jury Comments:**

*The West residence utilizes a straightforward pavilion concept, simple in planning yet meticulous in details. There is a feeling of exhilaration and at the same time an overall serenity.*

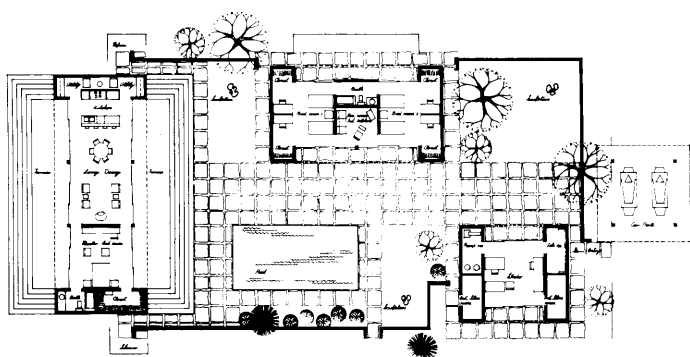
Of particular note was that the jury felt that form was not sacrificed by connecting the pavilion structures.

*This house gives a great sense of privacy. The building is not ridden with cliché's but shows restraint and good taste.*

*The West residence is done in the best tradition of the architectural profession.*



SECTION THRU CHILDRENS' PAVILION LOOKING WEST



Plant



**SOUTH ELEVATION**



EAST ELEVATION

WEST ELEVATION



NORTH ELEVATION





# Merit Award

## Jury Comments:

*The Duke residence is a fine use of wood, both from a structural and a detailing point of view.*

*The design concept takes maximum advantage of existing trees. There is a great variety developed from a simple, orderly system.*

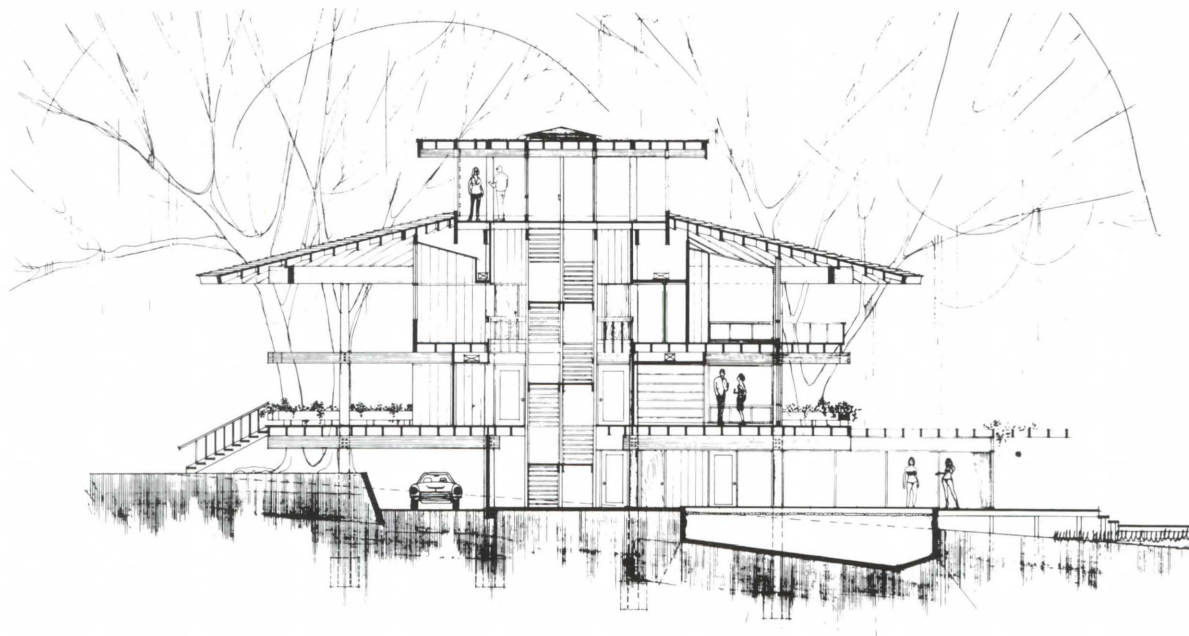
*This would appear to be a great place to live.*

## DAKE RESIDENCE Jacksonville, Florida

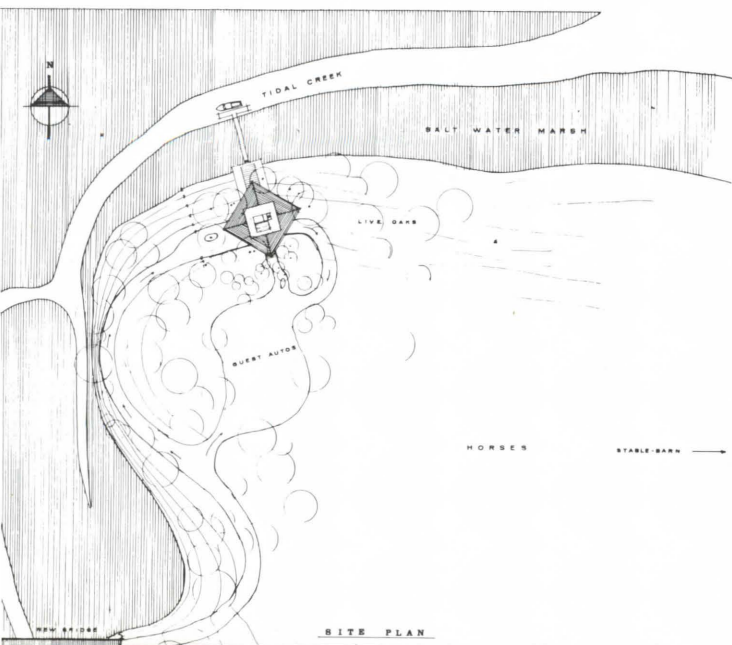
**Architect:** Robert C. Broward, Architect  
1922 Felch Avenue  
Jacksonville, Florida

**Contractor:** Donald Back

The client desired an unusual but common-sense house which in its design would recall old Florida coastal houses and would be entirely of wood.



SECTION A-A  
0 5 10 20 25



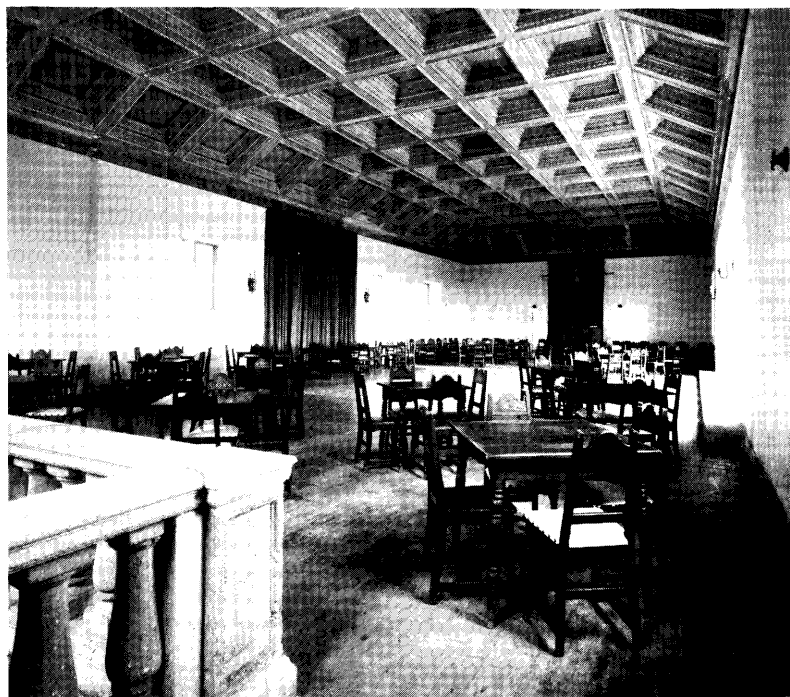
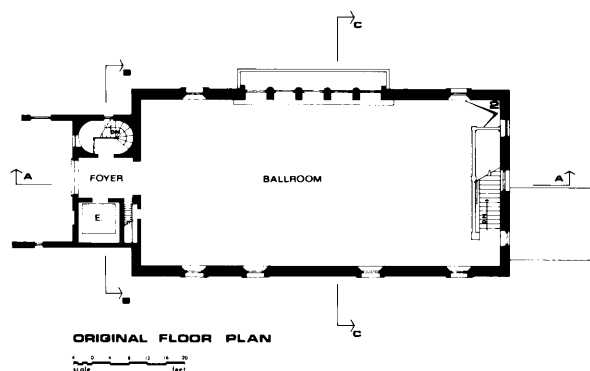


# RENOVATION OF DOUGLAS ENTRANCE Coral Gables, Florida

**Architect:** Ferendino/Grafton/Spillis/Candela  
800 Douglas Entrance  
Coral Gables, Florida

**Consulting Engineer, Landscape Architect, General Contractor:**  
Ferendino/Grafton/Spillis/Candela

In the 1920's, developer, George E. Merrick conceived of Douglas Entrance/ La Puerta de Sol (Gate of the Sun) as the gateway to the growing city of Coral Gables. Now, 50 years later, the firm of Ferendino/Grafton/Spillis/Candela has restored Douglas Entrance to the majestic building it was first intended in the 1920s.

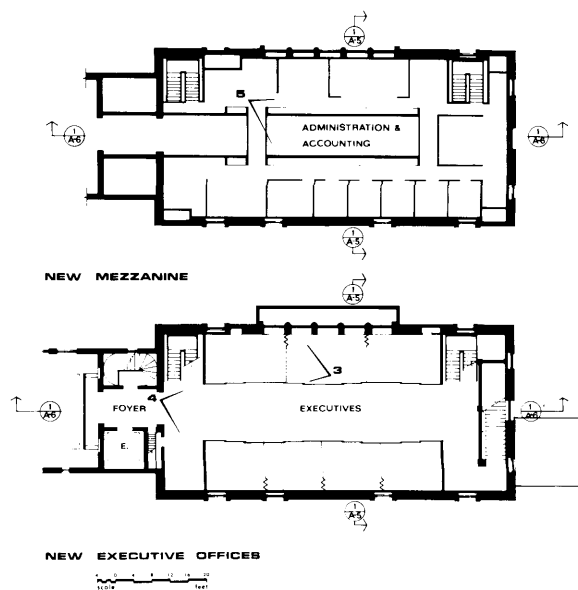


## Merit Award

### Jury Comments:

*The renovation of Douglas Entrance resulted in efficient use of space, pleasing interiors and the saving of an old building that is a credit to the community. All the positive qualities of recycling were done with skill, a high level of taste and sensitivity.*

*This project shows a respect for the best of the past while anticipating trends of the future.*



# Merit Award

## Jury Comments:

*The Lee residence is a good solution for an urban lot maintaining a sense of privacy both internally and externally. There is a great relation to the outdoors. Interior space is fused to exterior space thereby making maximum use of the lot.*

*The atrium focuses on an introverted concept. Exciting interior vistas unite a series of spacial sensations. Great variety and multiplicity is achieved with simple, consistent architectural forms.*

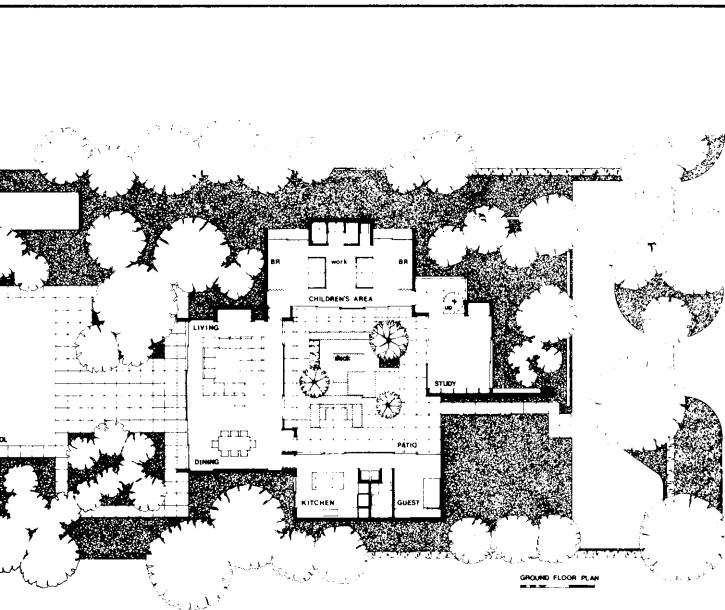
*The living room designed to open onto two long sides should have great appeal.*

## LEE RESIDENCE Miami, Florida

**Architect:** Borroto and Lee, Architects and Planners

**Contractor:** Owner

The Lee residence is located on a moderately wooded city lot with heavy street traffic. The owner required privacy and facilities for active family life.



# Honorable Mention

## Jury Comments:

*The living space of the Klein Residence, with pool and hard surfaces would appear to recognize and accomodate an indigenous tropical life style.*

*This residence has a clear structural system. The orderly plan and the simple use of materials gives a warm and comfortable feeling. The design is very competent.*

*Some of the jury members felt that this house was possibly too austere from the exterior.*

*Because of the materials selection this house should "wear well" over the years.*

## KLEIN RESIDENCE

Miami, Florida

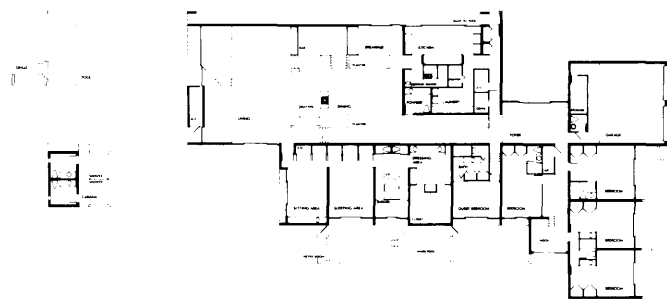
**Architect:** Donald Singer, AIA  
224 S.W. First Avenue  
Fort Lauderdale, Florida

**Structural Engineer:** De Zarraga & Donnell, Inc.

**Landscape Architect:** W.T. Bradshaw

**Contractor:** Edwin Vihlen

The Klein residence was designed for a large family with five teenage children and an enterprising bent towards entertaining large groups of people.



# Honorable Mention

## Jury Comments:

*The Francis Bellamy Elementary School seems to be an important community symbol. The design doesn't take itself too seriously but has a whimsical feeling, a sense of humor.*

*Adaptability and flexibility, permitting the school's administration and teachers to not feel timid about changing arrangement, graphics, furniture, etc., stimulates the learning process.*

*The jury felt that greater restraint with relation to color selection would help the interiors. The interior graphics seemed to be somewhat overdone.*

*The architect is to be commended for giving the Hillsborough County Board of Education value for their building dollar.*



## FRANCIS BELLAMY ELEMENTARY SCHOOL Tampa, Florida

**Architect:** Rowe/Holmes Associates Architects, Inc.  
5444 Bay Center Drive, Suite 205  
Tampa, Florida

**General Contractor:** Peter Brown Co., Inc.

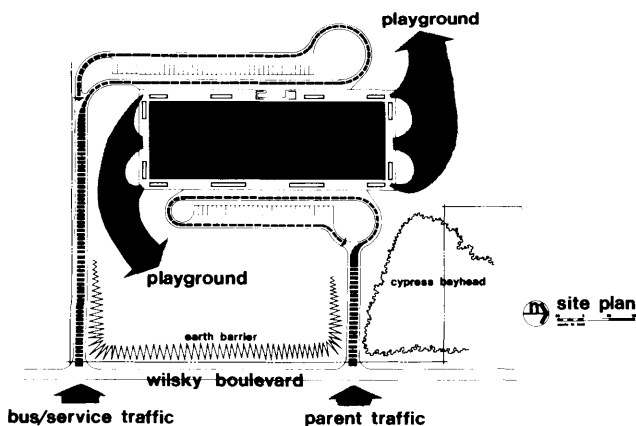
**Sitework & Foundation Contractor:**  
Proefke-Nielsen Construction Co.

**Structural Steel Frame Contractor:** Gulf Steel Corp.

**Roof Deck & Insulation Contractor:** Giffen Industries

**Graphics Contractor:** Brandon Sign Co.

Francis Bellamy Elementary School, named after the author of the National Anthem, is a patriotic symbol for the community.





# 60 YEARS OF CONTRACTING AND RELIABLE PROTECTION



## UNDER OUR HAT

Western Waterproofing Co. has been in the business of protecting buildings in many ways since 1915. For 20 years, the restoration of aging structures was our only service, and it remains a prime company specialty. But for 40 years we also have been an industry leader in preventive waterproofing of new structures. And we've added two other major service areas: special surfacings and Thermo-Sonics (temperature and sound insulation). Contact us on any of your projects in any of these. We'll meet your specifications—and we'll be around to honor our guarantees.

# **WESTERN** **WATERPROOFING CO.**

4924 LaSalle Street, Tampa, Fla. 33607 (813) 877-7646  
5995 Phillips Highway, Jacksonville, Fla. 32216 (904) 731-4433  
2990 Griffin Road, Ft. Lauderdale, Fla. 33312 (305) 961-3118



# Training Architecture

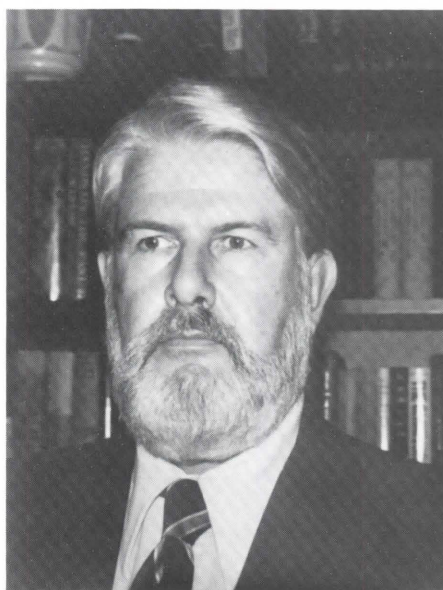
## WILL WE TRAIN PARAPROFESSIONALS TO MEET THE NEEDS OF THE DESIGN CONSTRUCTION INDUSTRY?

Dr. John B. Langley, A.I.A.  
Mid-Florida Chapter

The answer seems to be "yes", if the FAAIA Education and Research Commission's program meets its goals of attracting and keeping a larger segment of high potential students. To do this educators must broaden the secondary curriculum base and expand Brooking's (1969) basically cognitive federal model, used at many community colleges, to include many of the affective objectives which the Design/Construction professionals have set as high priority education goals. The 15-member commission made up of state department of education consultants, architects, and architectural educators took step number five in that direction this summer. Twelve high school drafting teachers from around the state spent 13 days in Orlando working with 15 architects and other experts to build the foundation for a solid Design/Construction Technology Program which will eventually go from grade 11 through the community college. Co-sponsored by the department of education, the FAAIA, and Florida Technological University, the aim of this college credit workshop was to expand the view of architectural drafting from the house plans of the past to instructional experiences encompassing the total Design/Construction industry and leading to the training of architectural and other paraprofessionals.

### THREE YEAR STUDY

Preliminary to the workshop were three years of study by the commission. Under the chairmanship of Howard Bochiardy, AIA, this study had produced a review of existing programs, an analyses of goals and needs, the development of secondary school outline curricula, and most importantly the development of a plan for local architectural, engineering, and contracting participation in, and assistance to the educational program. The purpose of this report is to indicate to architects what any chapter can and should do to provide local high school teachers with a new view of needed technical foundations.



*Dr. Langley, a member of the Mid-Florida Chapter since 1956, was awarded his Ed.D. this year by the University of Florida. His area of research was Post Secondary Design/Construction Technical Curriculum and Instruction. He is a member of the FAAIA Education and Research Commission and serves as a Florida area coordinator for the Continuing Education Program of the AIA. He was elected to Phi Delta Kappa in 1949 and served as Greater Orlando Chapter President 1973-74 and delegate to the National Biennial Council. He is an Adjunct Instructor in Architectural Technology at Seminole Community College, Sanford, Florida.*

### THE UNEXPECTED WORKSHOP

That the conventional view of high school architectural drafting did not prepare the participants for the workshop was evident in some of the evaluation reports. However, from the

specifics of drawing details to a technical survey curriculum based on contemporary educational theory was an adjustment that 70 percent of the teachers had started to make by the end of the workshop.

The workshop presented at Mid-Florida Technical Institute in Orlando was developed around an outline of twenty subject areas prepared by Bill G. Eppes, AIA, Professor of Building Construction, University of Florida, from the commission's secondary school curriculum outline. The subject areas were:

1. Organization of the Construction Industry.
2. Employment Opportunities in Construction Industry.
3. History and Evolution of House Construction in U.S.
4. Construction Documents.
5. Zoning, Building Codes, and Other Construction Industry Regulations.
6. Material Manufacturers and Suppliers.
7. Organization of Working Drawings and Plan Reading.
8. General Contractor Organizations.
9. Sub-Contractor Organizations.
10. Architectural and Engineering Office Organization — Responsibilities and Work Activities.
11. Shop Drawings.
12. Building Inspection.
13. Construction Equipment and Tools.
14. Drafting Standards and Techniques.
15. Materials — Properties and Uses — Wood.
16. Materials — Properties and Uses — Masonry and Concrete.
17. Materials — Manufactured Components.
18. Building Equipment.
19. Construction Methods — Light Construction.
20. Construction Methods — Heavy Construction.

The commission, through a grant from the FAAIA retained Mr. Richard Zipperly of Environmental Design Group to assemble the



# araprofessionals

faculty and coordinate the daily activities. His efforts brought about the participation of 15 members of the Mid-Florida Chapter A.I.A. and others from professional and supplier organizations. Dr. Robert F. Paugh of Florida Technological University coordinated the academic portion of the workshop.

## FOUNDATION IN OBJECTIVES

Before starting with the Design/Construction portion of the program, each participant was reintroduced to performance objectives through a two-day course with the Phi Delta Kappa *A Programmed Course for Writing of Performance Objectives* (1972), a constructed response linear program (pp. 1-49). Three elected chairmen were provided with the companion *Instructor's Manual for Teachers and Administrators*. A performance objective ideally contains three parts: one, a statement of what is to be known or done by the student; two, how the student is to show that he knows or has done Part I; and three, how well he is expected to have accomplished the objective.

Performance objectives are divided into three categories which represent the primary domains of learning. The least sophisticated is the cognitive level. (Bloom 1956) This represents primarily mental and intellectual processes. Included are knowledge, application, analysis, synthesis, and at the highest level of cognition, evaluation. Dave (1961) set the next level of learning domain as the psychomotor level which is primarily physical and neuromuscular. These are the manipulative learning experiences which come from imitation, manipulation which develop precision, articulation, and naturalization. Krathwohl (1956) provided a taxonomy for the highest domain of learning, the affective. This level is primarily attitudes, values, and feelings. Students must be willing to receive and respond to the educational experience. At higher levels he must value what he has learned. Finally he must organize his value conflicts and make them characteristic

of his behavior and life style. With this brief review the workshop members then started the presentations. Each of the 20 three hour sessions, as structured by the author, were divided into two parts; the first part was a presentation of the specific subject area information by lecture, demonstration, film, or field trip in which the whole group participated. This was organized around the presenter's written outline and a tape recording was made when the presentation was primarily lecture. The outline and tapes will be part of the commission's future study materials.

## WORK SHOP PARTICIPATION

After each presentation, the group divided into three committees. Each committee had an elected chairman who was responsible for the assigned review and grading of participants. To bring into clearfield their perceptions of each presentation, the workshop members were then assigned the task of analysis and synthesis.

With the presenter as consultant, the first of these committees discussed what cognitive elements from the presentation should be included in a grade 11 or 12 program. These elements were entered in the "Cognitive" notebook as appropriate program or performance objectives for that subject area. At this point the presenter went on to consult with the second committee while the first committee listed what educational experiences students might have to best meet these cognitive objectives. They also listed how the local AIA Chapter and others might assist them in providing these necessary experiences.

The second committee's task was more difficult. After listening to the presentation, they were assigned the task of determining related affective objectives. A case in point: Allen E. Arthur, Jr., A.I.A., an elected member of the Orange County Commission, spoke on Zoning Ordinances and Building Codes. The committee on affective objectives entered in

the "Affective" Notebook: (Stated in the "pre-objective" form).

The student should accept the concept of building codes and appreciate the need for zoning, safety regulations, and construction standards.

This committee then went on to suggest how this objective might be met in the classroom and what the Chapters might do to help.

## GENERAL GOALS

The third four member committee was assigned a task unrelated directly to the presentation. They were asked to discuss and provide performance objectives related to 15 general educational goals of Design/Construction Technology prioritized as to importance by the professional consumers of their product:

1. Learn how to examine and use information in problem-solving.
2. Develop a desire for learning now and in the future.
3. Develop pride in work and a feeling of self-worth.
4. Gain a general education related to the Design/Construction industry.
5. Learn how to be a good manager of office time, property, and resources.
6. Develop skills in reading plans, preparing construction documents, and the nomenclature of the design professions.
7. Develop skills to enter a specific field of the Design/Construction industry.
8. Develop good "office" character.
9. Learn about and try to understand the changes taking place in the Design/Construction industry.
10. Practice and understand the requirements of building construction health and safety.
11. Appreciate culture and beauty in the world.
12. Learn how good citizenship in the community affects the Design/Construction industry.
13. Gain information needed to make job selection.
14. Learn how professional organizations assist the Design/Construction industry in serving the community.
15. Learn how to respect and get along with people who think, dress and act differently.

(continued on next page)

Each of the general goals was expanded with similar goals to explain and clarify its meaning. These goals and their priority order were developed by the author in a recent study of Central Florida architects, engineers, and contractors. (Langley, 1975). The developed objectives, experiences, and supportive aids were entered into the "Goals" Notebook.

The committee assignments were rotated twice each day in order that all participants were given an opportunity to contribute. Under the direction of the committee chairman the day's entries were reviewed and edited before the next day's presentations.

### THE COMMISSION'S WORK AHEAD

From this one workshop the commission has the task now to review, edit, and organize some 60 pages of presentation outline, 30 hours of presentation tapes, and 165 pages of teachers' responses. It is hoped that funds will be forthcoming which will allow the preparation of a High School Design/Construction Technology Study Guide that will bring to interested high school teachers not only goal priorities, curricula, program and performance objectives, and suggested teaching techniques, but most importantly, a listing of who in each community will coordinate the professional and organizational help which the teachers have requested. If the commission's goals are to be realized, the professionals must recognize that they are part of the community's educational contract with the student.

### THE CLUSTER CURRICULUM

When the high school program study guide has been completed, the commission then must address itself to the task of suggesting a modified community college Design/Construction Technology curriculum which expands, specializes, completes, and reinforces the program at the high school level. This program must take into consideration the current community college concept of clustering. The author suggests that clustering be done around the two elements of design and construction. Those students going into the design cluster would be trained toward paraprofessional careers in architectural offices and the offices of the several engineering disciplines. These graduates of the two-year community college program would work with licensed professionals.

The second cluster would contain those educational experiences leading to technical careers in construction management, contracting, subcontracting, material supply and govern-

mental agencies dealing with codes and inspection. That these clusters have a great deal in common should be recognized in the first year of the community college program with the specialization coming in the second year.

### THE SPIRAL CURRICULUM

A second concept should also be recognized, that of the spiral curriculum. Under this concept there should be a definite effort to establish job entry level sequences which prepare students not only to stop their training at specific points short of the total program, but also pick up where they left off in continuing education to complete the next higher level.

### ARTICULATED CURRICULUM

Preprofessional training should also be among the goal concepts of an integrated community college program. This comes into important consideration because of two factors. First, while secondary school drafting courses, because of their perceived vocational nature, have not attracted a majority of the more academically motivated students, the Design/Construction Technology Program as being introductory to all of the professional university level Design/Construction careers should increase the numbers of both young men and women who aspire to this level. For this reason several community college programs should plan for articulation with the professional upper-level university programs. The profession bound students will then not only have a greater opportunity to seek this goal because of local availability, but will complete the community college program with job entry level skills in their chosen field should they for any reason be unable to complete the two to four years required to attain professional licensed status.

The second element of the preprofessional concept deals with attrition in the professional schools. The author has been recently told that the percentage of entering freshmen who complete professional school programs ranges from a high of 20 percent to a low of 8 percent. Regardless of the preciseness of these figures, to maintain required class size and quality in upper and graduate division programs requires very large infusion of diminishing resources at the lower division level.

From the professional viewpoint, the communities' needs may be best served by the high attrition rate that permits only the most qualified to graduate and become licensed. From the humanist view of education, this price may be no longer acceptable. Certainly when contemporary economics and public accountability are considered, the professionals must lead the way toward major changes in present patterns.

There is one other factor which may persuade the professionals to support the paraprofessional program. It is a purely selfish one. In the author's past 14 years as an office principle one pattern has repeated itself over and over again. Architectural graduates seem to stay only until they had gained the technical experience needed to set up their own practice. Their educational investment was so high that continued secondary status was not perceived as being reasonable. This has been somewhat ameliorated by the growth of large corporate practice at the expense of the small office. A proper paraprofessional program will provide a steady level of technicians interested in growing at the line level within a single firm.

There will still be openings for the professional graduate at the staff training level of the large firms, and the graduate who wishes to go it alone will have a stronger technical background. This will reduce the burden on the small offices of the expense of completing the graduate's training. It may even extend the time that sole proprietorship in the profession can exist.

In conclusion, the FAAIA Education and Research Commissioners have moral, ethical, and value considerations to make as they move on to the remaining parts of their task. To make the decisions best for the community and the profession, they will need the support and cooperation of both the educators and the licensed design professionals. The summer workshop has been a strong step in that direction.

### REFERENCES

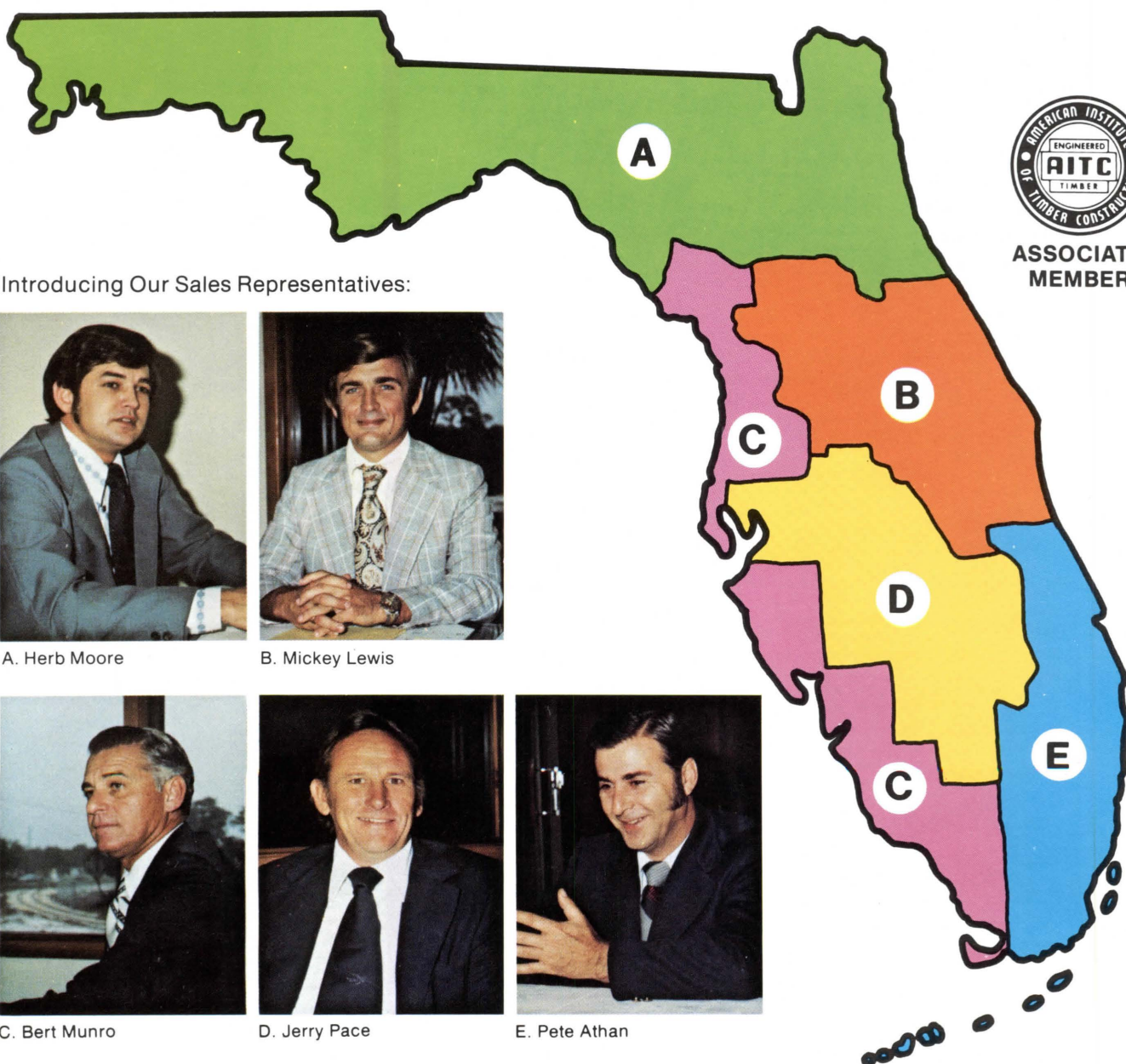
- Bloom, Benjamin S., Editor. *Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook I: Cognitive Domain*. New York: McKay Co., 1956.
- Brooking, Walter J., Developer. *Technical Education Program Series No. 9, Architectural and Building Construction Technology*. Washington: United States Government Printing Office, 1969.
- Dave, R.H. *Psychomotor Domain Taxonomy*. Department of Curriculum and Evaluation, National Institute of Education, New Delhi, India.
- Krathwohl, David R., Bloom, Benjamin S., Masia, Bertram B. *Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook II: Affective Domain*. New York: McKay Co., 1956.
- Langley, John B., Sr. *Goals for Design Construction Technology Programs in Community Colleges*. Ed.D. Dissertation, University of Florida, 1975.
- Phi Delta Kappa. *A Programmed Course for the Writing of Performance Objectives and Instructor's Manual for Teachers and Administrators*. Bloomington, Indiana: Phi Delta Kappa, Inc., 1972.



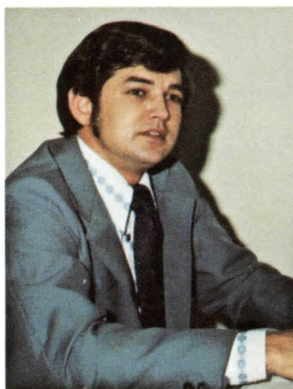
# UNIVERSAL BUILDING SPECIALTIES

## Product Lines we represent:

- **Laminated Wood** — Structural Wood Systems, Greenville, Alabama providing straight beams or curved beam systems — shop drawings and installation are provided.
- **Roof Decking** — (Fiber) — National Gypsum's Gold Bond Product "Tectum." Newark, Ohio and Arkadelphia, Arkansas.
- **Roof Decking** — (Solid Wood) — Crown Zellerbach in Western Red Cedar. New Westminster, B.C.
- **Roof Decking** — (Laminated) — Boise Cascade — Ponderosa Pine, Spruce, Fir-Larch. Boise, Idaho.
- **Fire Retardant Shakes & Shingles** — Western Red Cedar. Koppers Company, Feather River, California and Orville, Ohio.
- **Western Red Cedar** — Beams, Siding, Boards, Fascia, Trim, Shakes & Shingles — Delta Cedar, Ltd. — Surrey, B.C., Lamford, Ltd. — New Westminster, B.C., McDonald, Ltd. — Ft. Langley, B.C., Tumac Lumber Co., Inc. — Portland, Oregon, Barnett Lumber Ind. — Vancouver, B.C.



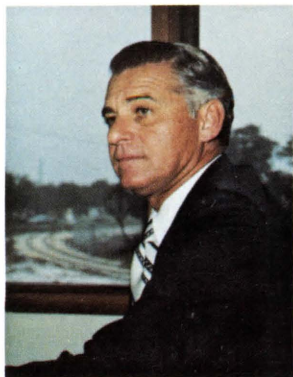
## Introducing Our Sales Representatives:



A. Herb Moore



B. Mickey Lewis



C. Bert Munro



D. Jerry Pace



E. Pete Athan



# Institute

(Continued from FA/14)

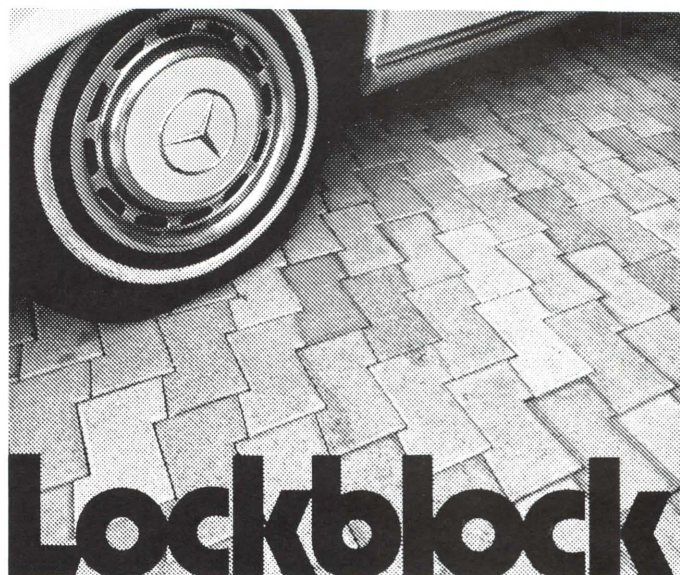
		(202 area code) (785 exchange)
Computer Applications	Robert A. Class, AIA	7258
Computerized Financial Management System	Edward G. Petrazio, AIA	7250
Computerized Specifications	John H. Schruben, FAIA/ Edward G. Petrazio, AIA	7369 7250
Conference on Federal Agency Construction Programs	Bruce H. Schafer/ Marshall E. Purnell	7382 7384
Congressional Action Team	Nicole Gara	7379
Congressional Liaison	Nicole Gara/ Ronald Marcus	7379 7381
Congressional Punch List	Nicole Gara	7379
Construction Cost Control	Robert A. Class, AIA	7258
Construction Industry	Edward G. Petrazio, AIA	7250
Construction Management	Alan B. Stover	7254
Consumer Products Safety Commission	James R. Dowling	7256
Continuing Education Program	Stuart W. Rose, Ph. D.	7354
Contractor-Architect Relations	Alan B. Stover	7254
Contractors Liaison	Edward G. Petrazio, AIA	7250
<b>Contracts and Forms (AIA Documents)</b>		
Orders/Sales	Terry L. Peck	7327
Interpretations	Alan B. Stover	7254
	Edward G. Petrazio, AIA	7250
Controller	William G. Wolverton, Hon. AIA	7322
Convention, AIA	Frank X. Brown	7395
Copyrights (AIA Documents)	Edward G. Petrazio, AIA	7250
Cost Based Compensation	Robert A. Class, AIA	7258
Council of Architectural Component Executives (CACE)	Robert A. Harris, AIA	7378
Council of Black Architectural Schools	James E. Ellison, AIA	7347
Current Techniques in Architectural Practice	Robert A. Class, AIA	7258
Data Filing	Robert A. Class, AIA	7258
Data Processing	Tom Ainsworth/ Lore Cleek	7335 7336
Deputy Executive Vice President	James A. Scheeler, FAIA	7315
Design/Build/Bid	Edward G. Petrazio, AIA	7250
Design Competitions	George E. Pettengill, Hon. AIA	7296
Design Programs	Maurice Payne, AIA	7364
Development Building	Robert A. Class, AIA	7258
Disciplinary Actions	Maureen Marx	7392
Documents Board	Alan B. Stover	7254
<b>Documents Subscription Service</b>		
Orders/Sales	Terry L. Peck	7327
Interpretations	Alan B. Stover/ Edward G. Petrazio, AIA	7254 7250
Drawing Standards	Robert A. Class, AIA	7258
Education and Research Department	James E. Ellison, AIA	7347
Educational Fellowships and Grants		7350
Election Kits	Nicole Gara	7379
Employer-Employee Relations	Alan B. Stover	7254
Employments Practices	Alan B. Stover	7254
Energy Programs	Joseph A. Demkin, AIA	7252
Energy Programs (Relating to Codes & Standards)	James R. Dowling/ Joseph A. Demkin, AIA	7256 7252
Engineer-Architect Interprofessional Relations	Robert A. Class, AIA	7258
Environment & Design Department	Michael B. Barker, AIP	7359
Environmental Education	James E. Ellison, AIA	7347
Environmental Impact	James R. Dowling	7256
Equal Employment Opportunity	Robert T. Coles, AIA	7234
Errors & Omissions Insurance	Edward G. Petrazio, AIA	7250
Ethics	J. Winfield Rankin, Hon. AIA	7388
Executive Committee Meetings	J. Winfield Rankin, Hon. AIA	7388
Executive Vice President	William L. Slayton, Hon. AIA	7310
Executives, Component	Robert A. Harris, AIA	7378
Factory Programming	Robert A. Class, AIA	7258
Federal Agencies Committee	Bruce H. Schafer/ Marshall E. Purnell	7382 7384
Federal Agency Programs	Bruce H. Schafer/ Marshall E. Purnell	7382 7384
Fees	Edward G. Petrazio, AIA	7250
Fellows Program	Maureen Marx	7392
Film Sales/Loans	Kathy Kalt	7295
Financial Management System for Architectural Firms	Edward G. Petrazio, AIA	7250
Fire Safety Buildings	James R. Dowling	7256
Five President's Conference	James E. Ellison, AIA	7347
Government Affairs Department	Arnold J. Prima, Jr., AIA	7374
Graphic Standards, Architectural		
Revisions	Alan B. Stover	7254
Orders/Sales	Kathie Davis	7274
Grassroots	Robert A. Harris, AIA	7378
GSA Interface Program	Edward G. Petrazio, AIA	7250

## Handbook of Professional Practice

Orders/Sales	Terry L. Peck	7327
Revisions, etc.	Alan B. Stover	7254
Headquarters Building	James A. Scheeler, FAIA	7315
Historic Preservation Programs	Maurice Payne, AIA/ Mark Maves	7364 7366
Honor Awards and Special Awards Program	Maria Murray	7390
Honorary Fellows	Maurice Payne, AIA	7364
Honorary Members	Maria Murray	7390
Housing Programs	John Gaillard	7363
ICED Liaison	Edward G. Petrazio, AIA	7250
Industrial Design Liaison	Edward G. Petrazio, AIA	7250
Information System for Architects	Robert A. Class, AIA	7258
Institute Affairs Department	J. Winfield Rankin, Hon. AIA	7388
Institute Scholar Program	James E. Ellison, AIA	7347
Insurance Committee	Edward G. Petrazio, AIA	7250
Insurance Programs for AIA Members	Edward G. Petrazio, AIA	7250
International Activities	Maurice Payne, AIA	7364
International Competitions	George E. Pettengill, Hon. AIA	7296
Interiors Industry Liaison	Edward G. Petrazio, AIA	7250
Internship Activities	James E. Ellison, AIA	7347
Joint Venture	Robert T. Coles, AIA/ Edward G. Petrazio, AIA	7234 7250
<b>Journal</b>		
Editor	Donald Canty	7277
Circulation Manager	Michael A. Benoit	7285
Production Manager	George L. Dant	7284
Publisher	Michael J. Hanley	7280
Sales Manager	Michael M. Wood	7272
Labor Liaison	Arnold J. Prima, Jr., AIA/ Marshall E. Purnell	7374 7384
Legal Citator	Edward G. Petrazio, AIA	7250
<b>Legal Questions</b>		
Documents	Edward G. Petrazio, AIA/ Alan B. Stover	7250 7254
Local and State Government	Arnold J. Prima, Jr., AIA James A. Scheeler, FAIA	7374 7315
Legislation, National	Nicole Gara/ Ronald M. Marcus	7379 7381
Legislative Minuteman Program	Nicole Gara	7379
Liability Insurance	Edward G. Petrazio, AIA	7250
Library	Susan Cosgrove	7294
Licensing & Registration	Hayden P. Mims, Executive Director, NCARB/ James E. Ellison, AIA	659-3996 7347
Life Cycle Costing	Robert A. Class, AIA	7258
Mail	Andrew Baile	7339
Mailing Lists	Kathie Davis	7274
Man Hour Data Bank	Robert A. Class, AIA	7258
Marketing Architectural Services	Edward G. Petrazio, AIA	7250
MASTERCOST	Robert A. Class, AIA	7258
MASTERSPEC	John H. Schruben, FAIA/ Edward G. Petrazio, AIA	7369 7250
Meetings (at headquarters)	Ann Ruebelmann	7396
Membership Directory (production)	Carole Jacobs	7262
MEMO	David Dildine	7265
Metric Conversion	Robert A. Class, AIA	7258
(relating to codes & standards)	James R. Dowling	7256
Minimum Property Standards (MPS)	James R. Dowling	7256
Minority Data Bank	Robert T. Coles, AIA	7234
Minority/Disadvantaged Scholarships		7349
Minority Guest Lecturers Program	James E. Ellison, AIA	7347
Minority Survey	Robert T. Coles, AIA	7234
Minuteman Program	Nicole Gara	7379
Model Building Codes	James R. Dowling	7256
National A/E Liaison	Robert A. Class, AIA	7258
National Architectural Accrediting Board, Inc.	Dr. Hugo Blasdel	833-1180
	Executive Director, NAAB/ James E. Ellison, AIA	7347
National Capital Committee	Bruce H. Schafer/ Marshall E. Purnell	7382 7384
National Forum on Growth Policy	Michael B. Barker, AIP	7359
National Legislation	Nicole Gara/ Ronald M. Marcus	7379 7381
NCARB	Hayden P. Mims, Executive Director, NCARB/ James E. Ellison, AIA	659-3996 7347
News Releases	Nancy Hallmark	7264
Nominations for National Institute Office	Maureen Marx	7392
Occupational Safety and Health Act (OSHA)	James R. Dowling	7256
Octagon House	Jeanne Butler, Curator/ Administrator	638-3105

(202 area code)  
(785 exchange)

Office Practice	Robert A. Class, AIA	7258
On-the-Job Training Programs	James E. Ellison, AIA	7347
Pension Programs — membership	William G. Wolverton, Hon. AIA	7322
Personnel Practices	Alan B. Stover	7254
Personnel Programs	Mary Sessions	7324
Practice Aids for Small Offices	Robert A. Class, AIA	7258
Preservation Programs	Maurice Payne, AIA/	7364
	Mark Maves	7366
Press Relations	Nancy Hallmark	7264
PRL	Evagene Bond	7267
Procurement	Edward G. Petrazio, AIA	7250
Producers Council Liaison	Edward G. Petrazio, AIA	7250
Product Literature Filing System	Robert A. Class, AIA	7258
Product Management Control	Joseph A. Demkin, AIA	7252
Production Systems for Architects	John H. Schruben, FAIA/	7369
and Engineers (PSAE)	Edward G. Petrazio, AIA	7250
Professional Liability Insurance	Edward G. Petrazio, AIA	7250
Professional Practice Department	Edward G. Petrazio, AIA	7250
Professional Practice Programs	Alan B. Stover	7254
Programming	Robert A. Class, AIA	7258
PSAE	John H. Schruben, FAIA	7369
Public Affairs Conference	Nicole Gara	7379
Public Relations Department	Muriel Campaglia	7259
Public Relations Letter	Evagene Bond	7267
Public Service TV and Radio	Muriel Campaglia	7259
Announcements		
Publications Marketing	Kathie Davis	7274
Regional/Urban Design Assistance	Michael B. Barker, AIP	7359
Teams (R/UDAT)		
Registration	Hayden P. Mims,	659-3996
	Executive Director, NCARB/	
Research Council	James E. Ellison, AIA	7347
Research Corporation	Donald Conway, AIA	7351
Research Fellowships	John P. Eberhard, AIA	785-8778
Research Programs	Donald Conway, AIA	7351
Research Switchboard	Donald Conway, AIA	7351
Reston Conference	Edward G. Petrazio, AIA	7250
Review of Architectural Periodicals	Sandy Kashdan	7357
(RAP)		
Review of Architectural Periodicals	Stuart W. Rose, Ph.D.	7354
(RAP) Tapes		
Roster of Registered Architects	Edward G. Petrazio, AIA	7250
R/UDAT	Michael B. Barker, AIP	7359
Scholarship Programs	Harriet Halbig	7350
Schools of Architecture	David Clarke/	785-2324
	James E. Ellison, AIA	7347
Small Office Practice Programs	Robert A. Class, AIA/	7258
	Edward G. Petrazio, AIA	7250
Social Events	Jacqueline Watson	7397
Solar Energy	Joseph A. Demkin, AIA	7252
Special Assessment Program	Arnold J. Prima, Jr., AIA	7374
Specifications	John H. Schruben, FAIA	7369
	Edward G. Petrazio, AIA	7250
Standard Accounting Manual	Alan B. Stover	7254
Standards of Ethical Practice	J. Winfield Rankin, Hon. AIA	7388
State Government Affairs Committee	Elizabeth Chalmers	7386
State Government Affairs Committee	Elizabeth Chalmers	7386
State Laws	Elizabeth Chalmers	7386
State Legislation Information	Elizabeth Chalmers	7386
Student Affairs	Student President/	7272
	James E. Ellison, AIA	7347
Student Building Type Competitions	Maurice Payne, AIA/	7364
	Mark Maves	7366
Subcontractor Liaison	Alan B. Stover	7254
Survey of the Profession	Edward G. Petrazio, AIA	7250
Sweet's Catalogues	Robert A. Class, AIA	7258
Switchboard	Hilda Gasch	0
Systems Building	Joseph A. Demkin, AIA	7252
Teachers' Seminar (AIA/ACSA)	James E. Ellison, AIA	7347
Technical Programs	Robert A. Class, AIA	7258
Technician Training Schools Program	James E. Ellison, AIA	7347
Training Laboratories, Architectural	Stuart W. Rose, Ph.D.	7354
Uniform Construction Index	Robert A. Class, AIA	7258
Uniform System	Robert A. Class, AIA	7258
Unprofessional Conduct Charges	Maureen Marx	7392
Urban Programs		
Regional/Urban Design	John Gaillard/	7363
Assistance Teams	Michael B. Barker, AIP	7359
Value Analysis	Marshall E. Burnell	7384
VISTA/AIA Joint Program	Harold Glover	7229
Women in Architecture	Alan B. Stover	7254



## PAVER SYSTEMS, INC. PRESENTS NEW QUALITY PAVING

Lockblock — a new non-mortar interlocking paving block that's decorative and durable. Capable of withstanding 9000 P.S.I. Installation is simple, laid directly on a sand base. Each block interlocks without mortar offering excellent drainage and traction. Aesthetic affects can be created around buildings, pool decks, driveways, walkways and dozens of other paving uses. Lockblock comes in five colors: gray, light tan, red, brown and black.

## Turblock "THE PAVING STONE WHICH ALLOWS NATURE TO SURVIVE"

Turblock is a multi-purpose paving block. It accepts great loads (6000 P.S.I.) when embedded with grass. It allows you to landscape with Turfblock and grass such things as parking lots, access roads, golf courses, or where there is a need for both greenery and heavy vehicle use. Another use is in erosion control. The apertures in Turfblock allow the grass to root holding the earth against water or wind erosion at an economical cost.

Paver Systems, Inc. manufactures these blocks in Lake Worth, Florida and can deliver on pallets anywhere in Florida. Please write or call for further information regarding specifications and installation instructions. Distributor inquiries invited.

 **Paver  
Systems**  
INCORPORATED

305 / 586-2957

1800 4th AVE NORTH  
LAKE WORTH, FLA. 33460

— VISIT US AT BOOTH No. 203 —





1.



2.



3.



4.

# PPG Solarcool® reflective glass. Its looks don't reflect its price.

Compared to tinted glass, Solarcool reflective glass can add as little as 10% to the cost of the total wall system.

Yet it brings virtually any type of light-commercial building to life with the unique and prestigious esthetics that only reflective glass can offer.

There's no limit to the effects you can achieve. Wood, concrete, masonry, and metal can all be dramatically complemented by reflective glass.

But besides good looks, Solarcool reflective glass gives you good performance, too.

Since it is reflective, it shields the sun's glare and reduces heat gain more efficiently than tinted

glass. So your air conditioning system is more economical.

In cold climates it can save on your heating costs, too. Because it becomes an excellent insulator when used in double-pane construction.

So treat yourself and your next building to the remarkable beauty and excellent performance of Solarcool reflective glass.

For all that you get, it's not all that expensive.

To find out more about it, see your local glass distributor, or write for our free booklets to: Dept. F95, Solarcool, PPG Industries, Inc., One Gateway Center, Pittsburgh, Pa. 15222.

PPG: a Concern for the Future

1. Professional Office Building, Panama City, Florida  
Architect: James Graham Chapman  
Contractor: Jean Mordellet
2. Roanoke Office Building, Phoenix, Arizona  
Architect: E. Logan Campbell  
Contractor: Shuart Corporation
3. Rusty Scupper Restaurant, Oakland, California  
Architect: Sandy & Babcock  
Contractor: Williams & Burrows, Inc.
4. Tucker Office Building, Atlanta, Georgia  
Architect: Arkhora & Associates  
Contractor: Hails Construction





# Architectural Products

## vip

### WATERPROOFING SYSTEM

7245 N.W. 43rd Street 305/592-6045  
Miami, Florida 33166

NEW!

## AQUA-CHEK

### DECORATIVE WATERPROOFING MASONRY COATING

Above or below grade . . . it checks  
moisture. Meets Fed. Specs.

For data:

phone (305) 592-3500, or write

ATLAS CHEMICAL CO.

4801 N.W. 77th Ave.

Miami, Florida 33166

Since 1919



### Tobias. Fidler. Associates

Lighting Systems  
Ceiling Systems  
Medical Systems  
Power Systems



1893 Northeast 164 Street  
Post Office Box 600277  
North Miami Beach, Florida 33160  
Miami 305/949-7282  
Broward 305/782-6444



### HYMAR STONE CORP.

DISTRIBUTORS OF NATURAL BUILDING  
STONE AND BUCKINGHAM VA. SLATE

P.O. BOX 484, PH. 813-686-4296  
LAKELAND, FLA. 33802

### UNIVERSAL BUILDING SPECIALTIES, INC.

- Western Red Cedar
- Laminated Wood Products
- Tectum Roof Deck

P.O. Box 1722 — Lakeland, Fla. 33802  
FLA. Toll Free (800) 282-9583

## EWELL

### INDUSTRIES

1248 New Tampa Hwy.  
Lakeland, Fla. 33802  
(813) 682-6163

Prestress Concrete  
Concrete Pipe  
Ready Mix Concrete  
Limerock  
Concrete Block

A Subsidiary of Gulfstream Land and Development Corp.

### FAS-SIGN-ATING LETTER-LITES

Enchanting . . . Imaginative Creations

10½ Volts — Years of Service!  
No Glass or High Voltage  
No Cold or Weather Dim-Out  
Components or Complete Letters  
Prompt Quotation

### FREE PLAQUE & SIGN CATALOG

Clair C. Burcaw 305 276-5319 Fred McClimans 813 392-2143  
Apt. E18 2400 S.W. 22nd Ave. Seminole, Fla. 33542  
Delray Beach, Fla. 33444 P.O. Box 3123

### LAKE SHORE MARKERS

P.O. Box 59, Erie, Pa. 16512

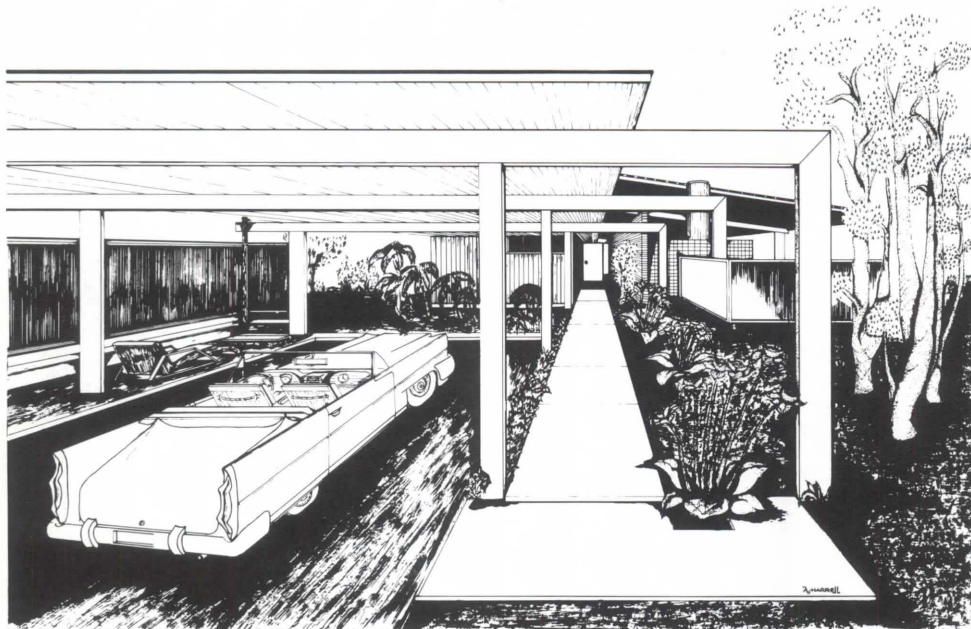
## FLINTKOTE

Floor Tile

Walton Wholesale Corp. Distributor  
7110 NE 4th Court, Miami 33138  
MIAMI (305) 754-2518  
FT. LAUDERDALE (305) 522-8151  
WEST PALM BEACH (305) 832-3707

Serving the trade since 1957





Pen and ink drawing done by student-inmate

## Inmates Learn Drafting

More than 50 inmates of the Florida correctional system are giving up the classic act of drawing an X across each day on a calendar in favor of drawing floor plans and elevations. Instead of idly marking time by crossing off dates, the men are in drafting classes, learning more valuable ways to use pencils.

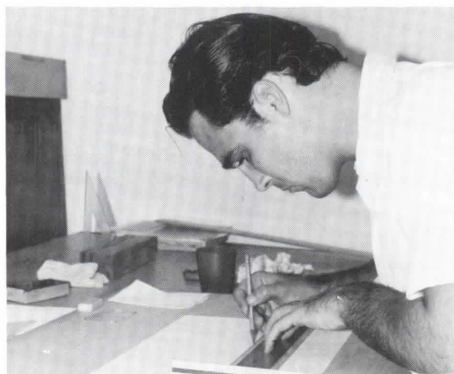
And more will learn architectural drafting skills as drafting classes are opened in two more institutions next year, according to the Florida Department of Offender Rehabilitation.

The men spend up to a year in half-day sessions learning drafting from lettering through production of a complete set of working drawings of a 2,000-square-foot, two-story house. The work "must be good enough to hand to a builder," according to Charles Beatty, who teaches two classes at Union Correctional Institution near Raiford.

"For the most part they (inmates) seem more interested than the usual public school students," Beatty said. "For one thing they have asked for this course. And they are screened with a test."

That is also true at Sumter Correctional Institution near Bushnell where former draftsman George Kirkwood teaches the other two classes.

Student working on drafting problem at Union Correctional Institution



"If a man wants to learn to become a draftsman he has all the opportunity in the world right here," Kirkwood said.

Kirkwood's goal with the men is to help them achieve a proficiency level of at least junior draftsmen. He estimates that two-thirds of his graduates could step right into employment at that level and then learn more with experience.

"Some of them could start right in as architectural draftsmen," Kirkwood said. "I'm proud of the work that they do."

One man who has graduated from Kirkwood's class was hired by DOR as a draftsman. He has since been promoted to cost estimator in material take-off.

How well the other graduates have fared is not known. DOR began for the first time this year to follow up on

graduates to see how the various types of vocational training has affected them after release. More than 1,500 are in vocational training now.

Statistics show that 62 per cent of those in the state correctional system do not have any occupational skill. And most have not finished high school. Thus both vocational and academic training are provided.

For the drafting course graduates who must remain incarcerated after finishing the training there are sometimes inmate drafting positions. Some men design projects under supervision of staff members.

Those who complete the course and are released leave with a certificate from the State Department of Education. The state education department certifies the course material and the instructors under the same criteria used in public schools. Those who have completed only part of the course are issued certificates of partial completion. The certificates list on the reverse side the level of attainment achieved.

Those to be released have the aid of vocational placement counselors who work at each major institution to help the men find jobs.

# HELP AMERICA WORK.

## Hire the ex-offender.

He'll work a lot harder than someone who hasn't been to jail, because he doesn't want to end up back in it. So if you have a job to give, call the National Alliance of Businessmen. Get people off the welfare rolls, and on the payrolls.

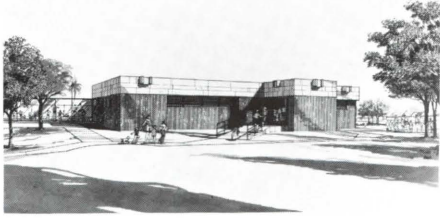
 **The National  
Alliance  
of Businessmen**

**Ad  
Council**

A Public Service of This Publication  
& The Advertising Council



# RECENT PROJECTS



**Swimming Pool and Bath House for Palm Springs North Park/School**

**Architect:**

**Leff & Alexander, Architects of Miami**

The facility will serve the community and the public school located adjacent to the site which is in northwest Dade County.

Materials used are split-face fluted block exterior walls, and exposed concrete parapet.

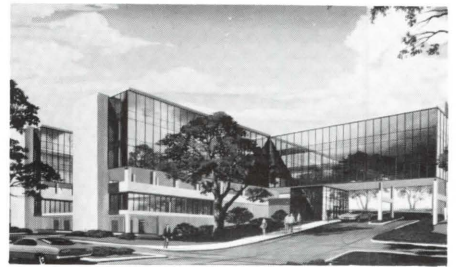


**The Bank of Miami's New Building**

**Architect:**

**Fraga & Associates of Coral Gables**

The ground level exterior of the new Bank of Miami building is of bronze aluminum and a tinted glass storefront rising above a new granite sidewalk. Above, the building is surfaced with white aluminum columns bordering tinted glass panels, with a concrete fascia at the top and bottom.



**Largo Medical Center**

**Architect:**

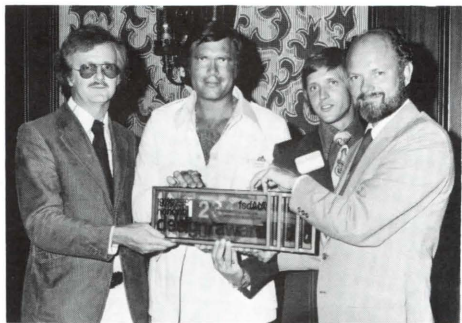
**Peter Marich, Associates, Inc. of Largo, Florida**

Largo will soon have one of the most modern medical centers in the country.

The Largo Medical Center will initially be a 246-bed facility with provisions for an additional three floors of 82 beds each.

The center will feature a structural bay system that is 23 feet wide, with 31-foot and 19-foot spans. Bethlehem Steel Corporation provided about 700 tons of structural steel shapes for this project.

## Newsnotes



### FLORIDA SOUTH WINNERS

Proud winners of the annual Design Awards Competition sponsored by the Florida South Chapter of the AIA are shown as they displayed their glass plaques during the Design Awards dinner at the Marriott Hotel (Aug. 2) in Miami. The winners were chosen by a jury of AIA members including Donald Singer and Philip Rickman, both of Ft. Lauderdale, and Robert Curry of Delray Beach.

Shown are (left to right) Don Lee of Borroto and Lee, who won first place for the design of Lee's own home; South Miami Architect Charles Harrison Pawley, who took second place for the design of his own office; Arthur Pyle, a designer for the firm of Barry Sugarman, third place winners for a home in South Miami, and fourth place winner Lester A. Pancoast, who is also Vice President/President Designate of the Chapter, for his design of a community center.

### FERENDINO APPOINTED FSBA

Governor Reubin O'D. Askew announced that Andrew J. Ferendino, FAIA, Chairman of the Board of Ferendino/Grafton/Spillis/Candela, Architects-Engineers-Planners, Miami, has been appointed to the Florida State Board of Architecture for a four-year term.

Ferendino has been registered to practice architecture in Florida since 1936.

He joins other Board members, Harry E. Burns, Jr., Jeffe G. Hoxie, R. Carroll Peacock and William S. Morrison.



## Calendar

**National Trust for Historic Preservation  
29th Annual Meeting  
Boston, Massachusetts  
October 8-12**

**Florida-Caribbean Theatre Design Conference  
Florida Atlantic University  
October 10-14**

**CRSI Design Award Entries Due  
November 15**

**Conference on Architecture and the Justice System  
Arlington, Va.  
November 16-18**

## USE SOLAR ENERGY

**FOR WATER HEATING  
OR  
POOL HEATING**



Finest quality COPPER system with solid state electronic sensors.

**SDI SOLAR DEVELOPMENT IN**  
4180 Westroads Dr., W.P.B., Fla. 33407  
842-8935

Certified NBS test data available



# Professional Services



**audio visual  
imagery inc.**

4135 AURORA ST., BAY 2  
CORAL GABLES, FL. 33146



**Ardaman & Associates, Inc.**  
Consulting Engineers in

**SOILS, FOUNDATIONS and  
MATERIALS TESTING**

6015 Randolph Street, P.O. Box 13003  
Orlando, Florida 32809 (305) 855-3860

Orlando - Sarasota - Cocoa  
Tallahassee - Pensacola - Ft. Myers

**WILDER ASSOCIATES, INC.**  
CONSULTING ENGINEERS

**ELECTRICAL  
MECHANICAL  
SANITARY**

Phone 904/398-2323  
4401 Emerson St.  
Jacksonville, Florida 32207

Engineers-Planners



**DIAZ-SECKINGER & ASSOCIATES, INC.**  
800 W. BUFFALO AVENUE • TAMPA, FLA. 33603  
(813) 229-2631

MUNICIPAL • ENVIRONMENTAL • TRANSPORTATION  
HIGHWAYS • BRIDGES • SANITARY • POLLUTION CONTROL  
CIVIL • STRUCTURAL • MECHANICAL • ELECTRICAL



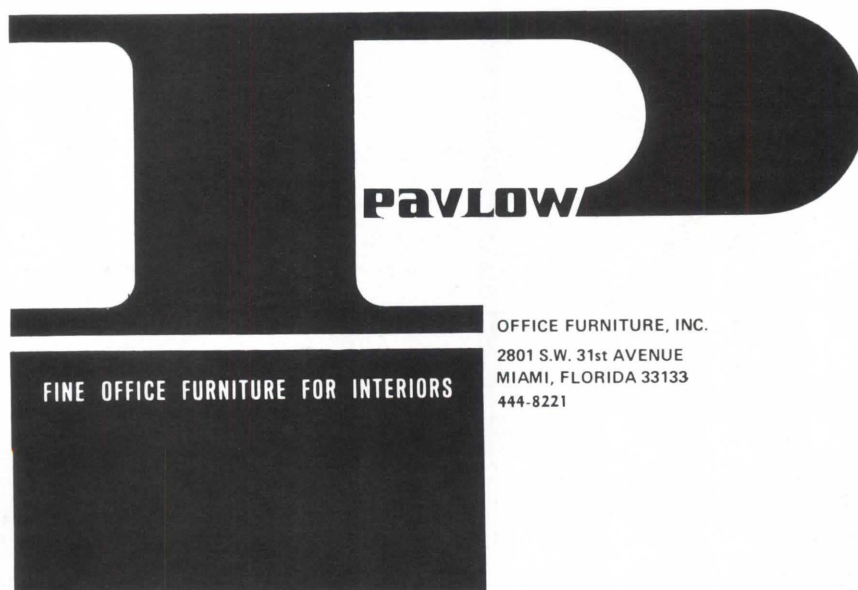
**Building Florida  
Since 1921**

P. O. Box 1912 Ph: 813-253-5321  
Tampa, Florida 33601 1202 Carmen St.

**FIRM BROCHURES**  
One to Four Colors  
**PRINTERS OF**  
**'THE FLORIDA ARCHITECT'**  
Specification Printing / Binding



1815 PONCE DE LEON BLVD. • 446-8151  
CORAL GABLES • FLORIDA • 33134



**FINE OFFICE FURNITURE FOR INTERIORS**

**OFFICE FURNITURE, INC.**  
2801 S.W. 31st AVENUE  
MIAMI, FLORIDA 33133  
444-8221

# DUNAN BRICK

REPRESENTING IN SOUTH FLORIDA:

## INTERPACE CORPORATION

- DECORATIVE GLAZED WALL & FLOOR TILE
- CERAMIC VENEER
- CUSTOM CERAMICS
- CERAMIC TILE MURALS
- PIAZZA FLOOR TILE

## INTERSTATE BRICK CO.

- INTERSTADO FLOOR TILE

## WHITACRE GREER

- ARCHITECTURAL BRICK PAVERS

## PEE DEE CERAMICS

- ARCHITECTURAL BRICK PAVERS

## FLA. BRICK & CLAY

- UNGLAZED FLOOR & WALL TILE

## TERRA FIRMA TILE

- CAST CEMENT TILE & CLAY PAVERS

## SALTILLO

- HANDMADE MEXICAN CLAY TILE

## THE UPCO COMPANY

- SETTING & GROUTING MATERIAL

SHOWROOM : 84 N.E. 40th STREET - MIAMI  
(305) 573-4092

LAKE WORTH  
518 7th AVE. NORTH  
(305) 582-5760

**DUNAN**

**BRICK**

HIALEAH  
1001 SE 11th ST.  
(305) 887-1525

